Module # 1 Mandate # 2
Research & Innovation

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Chapter 1: Research

1.1. Introduction:

PURPOSE: This Mandate sets the framework for the development and implementation of Research and Innovation activities at the Galgotias University and aims to nurture research culture and enhance innovation quotient in the University by promoting Research and development in the frontier areas of Science, Engineering and Humanities. It also encourages the Undergraduate, Postgraduate and Doctoral candidates and faculties to undertake the research in newly emerging frontier areas of Engineering and Non-Engineering including multidisciplinary fields.

The mandate shall foster a conducive milieu for interdisciplinary research practices generating & consequential and meaningful outcomes for the Nation in general and the region in particular. The mandate shall promote creation of a favorable environment to create centers of excellence for Research and Development and for dissemination of knowledge and its relevant application Regionally, Nationally and Globally and lead to an improved Innovation and Research quotient of Faculty and Students through Inter/Multi/Trans disciplinary Research Groups ultimately shall lead to establish Internationally Research Driven University. The document is developed for defining the processes, targets and opportunities for students, faculties and research scholars.

This Mandate is developed to facilitate the Deans and Faculty to carry out full-fledged research activity for the university through students/research scholars/self so as to meet the mentioned Research Targets based on expectations from various Regulatory bodies, Ranking and accreditation agencies.

The various research targets are

- The output of UG /PG students /research Scholars involved in research/project/internships/skilling shall must have one of the 3P’s: Publications, Patents and products
- No of publications (Scopus/ WoS)
- No of Ph.D. Awarded from the departments
- No of Ph.D. faculties in the university (program wise, department wise, schoolwide, in totality at university level)
- No of PhD scholars registered under each faculty
- No of research fellowships per faculties
- Faculty and students research awards
- Startups
● Product development
● MOUs
● Collaborative research with industry / International organizations
● Joint Ph.D. with industry / international researchers
● No of Industry supervisors /International supervisors
● Joint Consultancy
● Joint grants with institutions of National and International research (Department wise/ faculty wise)
● Grants research (Department wise/ faculty wise)
● Faculty as resource person
● Students and faculties trained on skillset and Research practices
● No of active research groups
● Center of Excellences established linked to research groups and performance
● No of patents filed (per department, school/ research group wise)
● No of Conferences (indexed and International) hosted/organised
● Sponsored labs (Research facility created)
  ● Increase in citations of WoS and Scopus of each faculty
  ● Increase of H index and i10 ratio of each faculty
● Research and Innovation Awards for University
  ● Faculty wise publications per semester
  ● Faculty wise Patents per semester
  ● Faculty wise projects per semester
  ● Students’ publications
  ● Students’ innovation awards
  ● Increase in citations of WoS and Scopus
  ● Increase of H index and i10 ratio of each faculty
  ● No of the conferences
1.2. Code of conduct:
The Annual targets shall be set for the individual faculty and department (based on the no of faculties and research scholars). The performance shall be Monitored every quarter and if improvements are not found within ending respective quarters, then corrective action is initiated in the same quarter. The concerns shall be issued warning letters. Receiving such three letters the concerned faculty may be subject to administrative action.

- Dean of the school shall be answerable to partial or full non-achievement of targets set for a semester and year overall schools. **To ensures everyone in the school follows the code of conduct**
- All research policies are on the University website so everyone must comply to the same
- Data must be entered on weekly basis in the all the google sheets
- The budget of the research activities must be submitted for the year ahead before start o financial year and on or before 31st March

1. Each professor of the university shall publish at least three SCI/SCOPUS Indexed journal papers/book chapters per semester. Each Associate Professor of the university shall publish at least two SCI/SCOPUS Indexed journal papers/book chapters per semester. Each Assistant Professor of the university shall publish at least one SCI/SCOPUS Indexed journal papers/book chapters per semester.

1.1. If you shall publish any paper/file any patent / apply for any award/apply for any research fund /consultancy without any GU affiliation or without the appropriate channel of the university while in service shall be treated as violation of code of conduct and liable for administrative action/termination.

1.2. After submitting the Manuscripts to the journal/Conferences, Details needs to be updated with School Research Coordinators for Data updating, who in turn will fill the respective Google sheet of UCRD.

1.3. No paper in the University shall be published until checked for plagiarism and after having 90% unique contents only it shall be sent for publication. All Research Papers need to be checked for Similarity Index using Licensed iThenticate of GU

1.4. If its joint paper along with other faculty of the GU then the weightage shall be 0.5 and if three faculties shall write the publication then weightage shall be 0.3 Publication with four faculties is not acceptable.

1.5. Faculty has to make sure at least one paper per year out of the targets given to him/her has to be in the journals of Q1/Q2/Q3 list.

1.6. Every faculty publication shall be considered only when he or she is first author
1.7. The affiliation used should be as “<NAME>, <DESIGNATION Professor/Associate Professor/Assistant Professor/Research Scholar/PG student/UG student>, Galgotias University, India

1.8. The first author must be the person who has contributed the most and not in the order of seniority.

1.9. The faculty who are from Galgotias University and doing Ph.D. from outside, must mention in their research paper ‘GU affiliation’.

1.10. In case of paper on the students work (Ph.D./PG/UG) then work published on the same shall have their name as first author.

1.11. Maximum four authors can be there in any publications, in case of more authors permission from the Dean, UCRD office must be sought.

1.12. Faculty target and UG/PG/PhD scholar targets are considered individually and not to be overlapped.

2. Every Faculty to guide 01 Post Graduate every year and 2 UG Project every year.

2.1. All faculties must ensure that if they are guiding project of UG students, then 100% UG student’s projects under each faculty should lead to Publications / Patent / Product.

2.2. Every year there shall be a project like mini project/ minor project/ major project.

2.3. All faculties should ensure that if they are guiding PG students, then 100% PG student’s projects shall lead to one publication/case studies as an outcome of their PG project.

2.4. Every project report at all level (UG / PG / Ph.D.), every internship report, every book, book chapter, patent draft, every assignment, presentation, research papers, monographs, the design must be checked through i-authenticate.

2.5. The UG project report should have 80% unique contents in the final report without that project shall not be get submitted for the examination

2.6. The PG project report should have 85% unique contents in the final report without that project shall not be get submitted for the examination

3. Every Professor must bring consultancy from the industry worth 1 lakh per year.
Every Associate Professor must bring consultancy from the industry worth 50k per year.
Every Assistant Professor must bring consultancy from the industry worth 20k per year

4. Every school shall establish at least one Center of Excellence which is of interdisciplinary nature involving minimum two or more schools / department of GU and involving minimum 2 Industries and 1 International organization and few Ph.D. students and PG and UG students.

4.1. Each Centre of Excellence of the university must apply for funding and shall result in spiraling out one or more UG, PG and Ph.Ds. every year
4.2. It must involve minimum 2 industries and 1 international organization and few Ph.D. students and PG and UG students leading to a minimum of 4 publications per year: one start- up and 2 consultancy assignments and one grant.

5. Every professor and Associate Professor and all doctorate faculties of GU must apply for funding not less than 10 lacs every year and generate the revenue every year equal to two months of their salary.

5.1. Dean of the school has to ensure all the grants applicable and open in India and abroad must be applied suitably and there shall be active funding from the various agencies
5.2. Dean of the school has to ensure all assistant professors are CoPI in at least 2 proposals and Every professor and Associate professor do apply for at least 5 proposals per year
5.3. DST/UGC/CSIR/ nongovernment grants / grants from various ministries also be explored.
5.4. Each Ph.D. supervisor along with his/her Ph.D. student must apply for funding Projects every year
5.5. Each Research group Head must ensure their group do apply for the grants in the relevant head
5.6. Each In charge of the CoE also ensures every year grants are fetched not less than 20 lacs.

6. All teaching faculty must be PhD by 2023.

6.1. Every faculty not having a Ph.D. degree shall identify the area and supervisor within 3 months of release of this document and register within 3 months of release of this mandate for Ph.D. either in GU or outside GU.
6.2. The university shall provide 50% concession in the PhD fees but if the faculty leaves the university before completion two years from the date of award then he/She has to reimburse the complete concession given to the same.

7. Every faculty having Ph.D. degree shall guide at least four Ph.D. scholars and 80% of the scholars must be of GU.
7.1. The PhD theses should have 90% unique contents in the final report without that thesis shall not be get submitted for the examination

8. Every Professor and Associate professor shall organize two STTP/FDP of minimum of 1 week per year with external Government/ Non-Government funding (in zero budget).
9. Every Faculty must be a resource person for a minimum of two events (One international and one outside GU in NIRF ranked University/Institute)
10. Every department should have IPR Cell and must establish Innovation cell.
10.1. Every school must organize patent awareness workshop of 2 days for every section of students from first year to final year and ensure every student in a group of four must file a patent.

10.2. Every faculty must file minimum one patent every year and Dean shall ensure that every 5 students of the school shall file one patent. So, on prodata basis target shall be set for the school.

10.3. Every school must organize innovation and entrepreneurship workshop for every section and one workshop for teachers to make them aware about innovations and entrepreneurship.

10.4. Every school shall ensure every section has minimum 2 startups accordingly targets must be set up.

11. Collaboration

11.1. Every department must sign 2 MOU every year and there shall be minimum 4 activities under each MOU.

11.2. Minimum 10 International researchers should be involved in active research for schools having more than 1000 students and all engineering schools.

11.3. Every school shall identify minimum 5 experts from international and 5 at National level not below professor and 5 industries CTO/CEO/MD and having experience 10 years in the same field with the same caliber as an expert bank which shall be approved by UCRD and whose expertise shall be availed for Ph.D./ setting up guidelines, project evaluation/ PG and Ph.D. examination, mentoring for Center of Excellence.

11.4. The Dean/SRC shall sign at least five MoU for collaborative activities for research and faculty exchange for teaching and research, with other elite institutions within the country or abroad and execute the required activities as according to the MoU, every semester.

11.5. Minimum five collaborative events with social organization.

11.6. School shall organize every fortnight one research talk.

11.7. Minimum five collaborative events with industry per semester.

12. Three journals Business/ Legal / Engineering and (Medical Sciences) should have regular volume. Every issue shall not have more than 10 papers and out of which maximum 3 papers from GU and rest must be from outside India. Efforts to be taken to make GU journals Scopus indexed.

13. Research Methodology workshop must be conducted for every undergraduate program of minimum of 3 credits and 45 hours / Self-study and research course and minor in entrepreneurship must be offered in every semester in each program.

13.1. It shall include patent drafting, research paper drafting and literature review as key components.

13.2. The ETE shall be in terms of research proposal or review paper.

13.3. Target should be for projects and exams should reflect the Scopus papers, book chapters and patents per year as papers are output and for the output to be there shall be a process which is in terms of project.
14. Dean shall ensure that all faculty members are members of minimum two Professional bodies of National/International repute.

15. Each department must organize 2 workshops for paper writing/2 workshops for patent writing and book chapter/book writing for each section of students and all the faculties.

16. Research Groups must be formed for each of the schools ensuring each faculty of the school to be part of at least one of the groups.

16.1 The projects and internships and Center of excellence must be linked to research groups.

16.2 Under each group every Saturday there shall be discussion on new papers in the same domain, discussion on at least 4 papers and gap identification and outcome be exhaustive list of such topics or areas, which can be called a bank of research areas.

16.3 It shall be utilized for the following research activities and is appreciated if the topic is chosen from this Bank:
   a. The Bank can be made available to the research scholars who may use it for their doctoral thesis.
   b. Similarly, the faculty shall also avail the Bank for identifying the subject for their research projects.
   c. Even for industry sponsored projects or for collaboration with other institutions, the Bank shall be utilized.

17. Publishing annual intellectual capital report by compilation of all research activities schoolwide on 31st March of every year.

18. The complete research profile twice in each semester at the beginning of the semester and end of the semester for each faculty and updated in the central google sheet for orchid, vidwan, publon and others.

19. The Dean/SRC shall ensure that at least one corporate training program given by the school to the industry/agency once in each semester.

20. Every department must ensure the data is uploaded and in sync with school data at central level and the central sheets to be updated on day-on-day basis.

- **GU Publications (Central sheets)** - You can find your Research/Review Article, Conferences Publication, Books and Book Chapters in the University Repository R&D PUBLICATIONS@GU, if the record is not available kindly update the same through this Link: [https://tinyurl.com/GUPUBLICATIONS](https://tinyurl.com/GUPUBLICATIONS)

- **(Publication till date those are published to be updated (Drafted/Communicated/Accepted)** [https://forms.gle/UuNGMcHytmvTwTT08](https://forms.gle/UuNGMcHytmvTwTT08)

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• **Verify your Patent** data available in this link [PATENT DATA @GU](https://tinyurl.com/GLU AWARDS REC), if not available kindly update in this Link: [https://tinyurl.com/GLU AWARDS REC](https://tinyurl.com/GLU AWARDS REC)

• **Student UG/PG Student Project Publications From** [https://forms.gle/MzRsRngwhtBPQRcA](https://forms.gle/MzRsRngwhtBPQRcA)  
• **Verify your Uploading Status of student Project Publication:** [https://docs.google.com/spreadsheets/d/1V6CErCVLbAz8IvJzX86ifvZ8zyEtBgK-XG0Y3jBDlMU/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1V6CErCVLbAz8IvJzX86ifvZ8zyEtBgK-XG0Y3jBDlMU/edit?usp=sharing)

• **AWARDS / RECOGNITION / RESOURCE PERSON/Ph.D. Supervised**  
  [https://docs.google.com/forms/d/e/1FAIpQLScqFSi5lTkf2VYoD5WwKaWkESTYA0y68uhCUM7OnoslWKHLjw/viewform](https://docs.google.com/forms/d/e/1FAIpQLScqFSi5lTkf2VYoD5WwKaWkESTYA0y68uhCUM7OnoslWKHLjw/viewform)

  **Event Approval Form**  
  [https://docs.google.com/forms/d/e/1FAIpQLSdzCXTXisGlkDXFv-91ZgX78pB0UB1EMVpNaVtboRk4aS87_A/viewform](https://docs.google.com/forms/d/e/1FAIpQLSdzCXTXisGlkDXFv-91ZgX78pB0UB1EMVpNaVtboRk4aS87_A/viewform)

  **Event Organized by Faculty**  
  [https://forms.gle/EJLMzjKbKpNxKgNr8](https://forms.gle/EJLMzjKbKpNxKgNr8)

• **Research Groups**  
  [https://docs.google.com/spreadsheets/d/1rAiEzy7qPS0ZuXZ8ZIlLwv_uO7loQTNC4ph1hj-4yvA/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1rAiEzy7qPS0ZuXZ8ZIlLwv_uO7loQTNC4ph1hj-4yvA/edit?usp=sharing)

• **Research Coordinator List**  
  [https://docs.google.com/spreadsheets/d/1WdUmaJoj3eVHTsrLc10UM4zmAKWwVYMB01lDFtm3Axc/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1WdUmaJoj3eVHTsrLc10UM4zmAKWwVYMB01lDFtm3Axc/edit?usp=sharing)

• **Seed Fund**  
  [https://docs.google.com/spreadsheets/d/1FeRrO7LQQkpcjcwcm5AI_3Y6r1n8cktnBVhN4YhJTrk/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1FeRrO7LQQkpcjcwcm5AI_3Y6r1n8cktnBVhN4YhJTrk/edit?usp=sharing)

• **Consultancy Sheet**  
  [https://docs.google.com/spreadsheets/d/1PCfK1d1m-s72aj9TcEnOE2gR0xvD5E0CeZTQ9Z90M7Q/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1PCfK1d1m-s72aj9TcEnOE2gR0xvD5E0CeZTQ9Z90M7Q/edit?usp=sharing)

• **Grant Opportunities**  
  [https://docs.google.com/spreadsheets/d/125ynp0NeSEXdMJx2abEfOdU-3HTDqZel758HHNzNO88/edit?usp=sharing](https://docs.google.com/spreadsheets/d/125ynp0NeSEXdMJx2abEfOdU-3HTDqZel758HHNzNO88/edit?usp=sharing)

• **Research Award Link**  
  [https://docs.google.com/spreadsheets/d/1DY34EzqwAp834Ga7UQ2jozthGRH0gC5zp6IPXzTAp/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1DY34EzqwAp834Ga7UQ2jozthGRH0gC5zp6IPXzTAp/edit?usp=sharing)
1.3. University Center for Research and Development
UCRD shall frame the university research calendar for accomplishing research goals (long term and short-term goals). At the university level, University Center Research development (UCRD) shall be established which comprises VC as Chair, Dean PG & Ph.D., Chief research coordinator, Dean research experts from various schools, selected on an annual basis as per the following composition

The Research advisory board comprising of experts from international and national organizations shall provide inputs on world-class practices and aligning roadmap for accomplishing the Vision of the university

The Committee
1. Vice-Chancellor (Ex-officio and Chairman)
2. Pro-Vice-Chancellor (Ex-officio)
3. UCRD Team as per organization chart as in 1.1 (Ex-officio)
4. Dean PG/ Ph.D. program- (Ex-officio)
5. Dean Academics (Ex-officio)
6. Deans of Schools (Chairpersons of SRCs)- (Ex-officio)
7. Two external Research Experts from reputed research labs/institutions (nominated by VC) appointed as per RAC norms of UGC
8. Registrar of the university

Figure 1: Organizational Structure of Research

Roles and Responsibilities
1. The University Center of Research and Development Team shall coordinate between various verticals under R and D of the university and schools
2. UCRD shall frame the university research calendar for accomplishing research targets. Setting up targets v/s achievements of school performance month-wise and presenting before VC and senior management
3. Develop, monitor and review policies relating to the University’s research activities, including research and research training, internationalization and international
reputation, and their management

4. To establish School Research Committees (SRCs) and monitor the research activities at the levels of schools

5. To oversee research and research activities of the University via strategic policy and management decisions taken within the URC and through the activities of its School Research committees (SRCs)

6. Guide, monitor, review and endorse the activities of its Sub-committees such as School Research Committees (SRCs),

7. To Ensure appropriate interaction on research issues, as well as the dissemination of information and advice to the Academic Council

8. To set the ordinances and regulations for UG/PG Projects and Research students in the light of UGC guidelines through the Research Advisory Committee.

9. Defined the calendar for Project Review of UG and PG of all programs of all semesters to understand the status of the progress of the paper preparation by students. All Projects must be mapped with Research Groups

10. Shall develop processes and activities based on the advice of Research Advisory Board (RAB)

11. Search for grant and collaboration opportunities shall be shared with every faculty in the university and the Deans have to ensure that a maximum number of proposals are submitted and opportunities are grabbed.

12. Ensure the availed grants are actually implemented in the university and yearly reports are filled and sent to the agencies

13. Shall ensure full funds are released and if not shall ensure reminders are sent to the agencies

14. Annual reports are available from all PI and necessary reminders/guidelines/instructions and letters are issued if it’s not trained as per guidelines

15. Review, on an annual basis, submissions for formation and/or continuation of University Research Strengths and advise on funding allocations to, and the status of, all URC-funded research groups.

16. Each research grant fund shall be maintained in a separate account until the completion of the project by the Dean/SRC/URC.
   - One copy of the applied fund must be submitted to UCRD and VC office
   - Each Ph.D. supervisor along with his/her Ph.D. student must apply for funding every year
   - The URC shall strictly monitor the activities and progress of the funded project.
     Any malpractice or unsatisfactory activities shall be dealt seriously with by URC.

17. Publishing annual intellectual capital report by compilation of all research activities schoolwide and also at central level of all research coordinators who are working at university level

18. Provide leadership and advice on mechanisms to improve monitoring, benchmarking and reporting of the University’s research performance.

19. Hold one event every fortnight as outreach activity to two events annually to facilitate the exchange and dissemination of information concerning cutting age technology or research front from international/national bank of experts not below one having 3000
plus citations for research and research training issues for the broader research community

20. Organize visits by eminent researchers to interact with the faculty and students.

21. Organize national and international conferences with the participation of eminent scientists/technologists in specialized/emerging areas.

22. Develop plans and coordinate efforts of departments of Schools, to obtain recognition for their research activities by national, international agencies such as UGC, DST, ICSSR, ICHR, ICPR etc.

23. Ensure code of conduct is strictly followed and schools and students are given a helping hand.

24. R&D fund allocation and creation of R & D facilities

25. R&D promotion activities for Faculty and students such as participating in International Conferences, Seminars, Workshops, etc.

26. To promote and keeping track of research publications in Scopus Indexed Conferences and Journals

27. Encouraging Research Proposal for external funding agencies by faculty and doctoral students.

28. To increase the Research MOU’s of Galgotias University.

29. To conduct Publishing awareness programs continuously throughout the year to create a Research environment.

30. Encourage and ensure every school has one Center for Excellence.

31. Research Target setting for university and schools and follow-up process.

32. To provide supporting infrastructure & resources like space, facilities, Patent filing, funding, data handling & other for various research categories

33. To ensure that each faculty publishes at least one patent every year.

34. To ensure that PG/UG students publish one patent with Research Group members.

35. To provide Incentives in terms of monetary benefits, Promotions/awards and Relaxation in OD/Attendance for Faculty and students.

36. To Provide a Best Research faculty award and best outgoing Research student award during every convocation based on their research outcomes like Papers/Book chapters published and funded projects received.

37. To integrate teaching and research

38. Collaboration with publishing houses for edited books and authored books publication by GU faculties.

39. UCRD holds the responsibility of conducting Ethical Research and Innovation. UCRD shall issue every semester guideline to all the faculty members and students about Do’s and Don’ts of the publications.

40. UCRD must maintain the record of the Publications of the schools central including status Communicated/Accepted/Published/Indexed as per the format.

41. UCRD collects the Data of Research Publications which is Communicated/ Accepted/ Published/ Indexed. For the same the format is mentioned in the Data of Research Publication Progress Status format.
Meetings and Quorum

- The University Center for Research and Development shall meet every week once in a year the quorum for meetings shall be 2/3rd of members.
- The draft Minutes of the Committee shall be circulated to the VC and Honorable Chancellor, as soon as possible for noting and/or discussion/decision as necessary.
- *URC will be constituted once, based on the performance every two year be reconstituted.*

Authority and Accountability

The Committee may investigate any matter falling within its terms of reference, calling on whatever resources and information it considers necessary to do so under closely under Vice Chancellor

- The Committee regulates the functioning of SRCs but in consultations and under intimation of higher ups.

Performance Evaluation

The Committee shall, monthly review its own performance and its terms of reference and shall report its conclusions and recommend any changes it considers necessary to the Vice Chancellor.

1.4. School Research Committee (SRC)

The Dean of each school shall be responsible for managing the research activities in collaboration with Division Chairs and School Research Committee (SRC) which comprises at most 10 members with Ph.D. with proven research accomplishments including Dean.

1.4.1. The Committee

Total number of members to be restricted to 10.

1. Dean of the School (Chairman)
2. Professor and Associate Professors (maximum of four members to be chosen from various domains of research areas including Ph.D. coordinator of the school) to be nominated by Dean and approved by VC
3. *All members must have Ph. D. Degree*

1.4.2. Roles and Responsibilities

1. **To ensures everyone in the school follows the code of conduct**
2. To organize and oversee the progress of research activities to take steps to enhance the research capability of the school.
   i. By motivating the faculty and research scholars towards research activities
   ii. By enabling them to understand about research opportunities and its relevance in teaching and university activities.
3. To monitor and review the research activity in ensuring ethics, benchmarking the quality of research activity and its impact to promote excellence and development of research within the school.
4. To organize advanced research training to promote interdisciplinary research and collaborate with reputed national and international research institutions and labs.

5. To maintain all data related to school and update time to time in the central database every Saturday without fail.

6. To initiate, review and monitor the research activities relating to the Research scholars (PG and Ph.D.) of the school in its totality such as:
   a) Admission and Selection process of Research students.
   b) Allotment of Ph.D. guides to the selected research students based on their eligibility and research area based on their presentations/interviews for the full quorum of SRC.
   c) To recommend Doctoral Committee (DC) for each candidate.
   d) To approve the proposed research plan of the candidate as approved by DC.
   e) To schedule and convene DC meetings and preparing minutes of meetings and to circulate.
   f) To ensure the DC committee is monitoring progress.
   g) Issue letters to supervisors and candidates where in there is no progress and no outcome.
   h) To approve the long abstract of the thesis on its completion and the final title of the thesis.
   i) To recommend the panel for the candidate.
   j) To take necessary action required towards the recommendations of DC. and thus, play a role required for the operationalization of the Ph.D. program subject to the overall supervision and guidance of the URC and submit the reports in the prescribed format (Annexure-2) consisting of minutes, executive summary with highlights) to URC.

7. To initiate, review and monitor the research activities relating to the faculty members of the school in its totality such as Establishment of research clusters, units to promote both national and international funding opportunities.

8. To promote interdisciplinary research through the activities to enhance relationships and working with Research Committees of other Schools within the University by organizing FDPs, Workshops, Conferences etc.

9. To undertake the activities to develop external relationships with funding agencies of both national and international, with other Universities and Research Institutions.

10. To Communicate and publish the successes and outputs of School Research activities with Dean-Research update on school website.

11. Monitor progress of the Center of Excellence and make those self-relevant.

12. Shall be responsible for academic integrity of the school and shall maintain all records of plagiarism check for all articles and projects and papers.

13. Encouraging Research Proposal for external funding agencies by faculty and doctoral students by mobilizing call for funding amongst all and conducting workshop on writing good research proposal.

14. The Dean/SRC of each school shall prepare, maintain and update the list of funding agencies relevant to the school both disciplinary and interdisciplinary.
1.4.3. **Training for writing Good funding Research proposal and Publications**

Generally, faculties are eager to conduct research, but because of the lack of expertise to write a research proposal or having insufficient research skills, they are unable to channelize their efforts effectively. Hence, in many cases, a research proposal is rejected by a funding agency. Even for publication of papers because of the lack of knowledge about how to write a paper and under which format it should be submitted, sometimes the papers are not accepted. Therefore, the University shall organize rigorous training programmes for researchers given below.

1. How to write research proposal
2. How to write research paper
3. Networking
4. Seminars/Workshops with National 7 International agencies.

1.4.4. **Research Group Formations**

1. Research area identification.
   - Preference
   - Grouping
2. Each faculty to be part of one group.

- The Dean/SRC shall identify divisional research groups under each division and submit the entire list of divisional research groups in the school to URC at the beginning of each academic year.
  - UCRD shall be identifying the strategic research groups where each group will have a chair (see the organizational structure of GU research as shown in **Figure 1**) at the beginning of each academic year. Each strategic research group shall concentrate on a particular research area of interdisciplinary nature.
  - Faculties having the same research interest shall join the group might be interdisciplinary in nature. The research groups must be interdisciplinary and should not change frequently. Every faculty must be part of one of the research groups.
  - The projects guided by respective faculty must fall under the area of the research group he or she is attached.
  - Research group activity shall be every week in respective schools
  - Every Research group should have at least 4 members. All members of the research group collectively must publish at least 10 research papers and file 2 patents every semester

1.4.5. **Collaborative Research Projects:**

The University-Industry Interaction is the demand of the day. If we want to contribute to the society at large, the University has to closely work with industries and different organizations. For that, the University shall plan the following activities:
i. Industry Sponsored Research Project: An organization can sponsor a project and the experts of the institution concerned can conduct research on this project for which the financial support will come from the organization. As a result, if any patent is registered, then there shall be a sharing of income coming out of the patent among the industry, researcher and University. This will lead to three kinds of benefit:
   a. The researcher will get exposures to the concerned area of research;
   b. The industry will get solutions to its problem; and,
   c. The researcher, University and Industry can earn money and at the end, the society ultimately will benefit.

ii. Interdisciplinary Research: Interdisciplinary research is a must nowadays. No department, institution, researcher or a scholar can address a research problem in which more than one discipline is involved and unless they get together and conduct interdisciplinary research no fruitful findings can be arrived at. Therefore, the University has decided to have exercise in interdisciplinary research activities for which the following steps will be taken:
   a. Identify the interdisciplinary area.
   b. Identify the different experts from concerned disciplines who can work together.
   c. Study the requirement of the infrastructure to conduct the concerned interdisciplinary research.
   d. Explore possibilities to find resources for such interdisciplinary research.

1.4.6. Collaborative International Research
Collaborative international research is essential to facilitate mutual learning and expertise sharing. The University plans to have the MoUs with prominent research institutions abroad, for conducting research jointly in the areas of common interest. For this purpose, a Task Force shall be constituted that will constantly explore the possibilities of having such collaborative or joint research in terms of thrust areas, decide the modus operandi of conducting such research and attend to other relevant aspects.

1.4.7. Meetings and Quorum
- The Research Committee shall meet four times in a year (twice per semester) or more frequently if the business requiring its attention should so dictate.
- Mandatory four meetings per year must be planned every Saturday every month
- The quorum for meetings shall be 2/3rd of members.
- The Committee may also invite Dean of other schools, or other person to attend any meeting(s) of the Committee, as it may from time to time consider desirable, to assist the Committee in the attainment of its objectives.
- In addition, SRC may invite two student members (one from early research career students and one from senior research career student for the meeting to discuss the agenda items that may need student inputs.
● The draft Minutes of the Research Committee shall be circulated to the UCRD and VC with action taken report of previous meeting amongst authorities of the university same day
● SRC will be reconstituted once in two years tenure shall be same as RAC

1.4.8. Authority and Accountability
● The Committee shall operate under delegated authority from the URC.
● The Committee may investigate any matter falling within its terms of reference, calling on whatever resources and information it considers necessary to do so.
● The Committee is authorized to seek any information it requires from any employee of School to enable it to discharge its responsibilities and shall have made available to it on a timely basis all information requested from any employee in a clear and well-organized manner.

1.4.9. Performance Evaluation
The Research Committee shall, review its own performance every month and its terms of reference and shall report its conclusions and recommend any changes it considers necessary to the UCRD

1.4.10. Checklist:
● The Dean/SRC shall submit the details of the research performance of each faculty as according to the Appendix 1.1.
● The details of funded projects, projects submitted for funding, active consultancy projects, and patents filed per semester submitted by the Dean/SRC/Chair of strategic research group to Dean-Research/URC, as according to Appendices 1.2, 1.3, 1.4, 1.5 and 1.6.
## Research Targets 2021-22 (only sample and complete roadmap to be prepared by deans for each department under them)

<table>
<thead>
<tr>
<th>School Department</th>
<th>Faculty as per cadre</th>
<th>No. of Students</th>
<th>Targets Publications in Journals Conferences, (Indexed in Scopus/ Web of Science)/ Book (Authored or Edited) / Book Chapter</th>
<th>Patent</th>
<th>Consulting</th>
<th>Organizing Conference / FDP / STTP / Training program</th>
<th>PhD Pursuing</th>
<th>Faculties PhD Not Registered</th>
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<td>Asst. Prof.</td>
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<td>PG</td>
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<td>10</td>
<td>16</td>
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<td>18</td>
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<tr>
<td>Department of Electrical Electronics and Communication Engineering</td>
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<td>58</td>
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<tr>
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<td><strong>81</strong></td>
<td><strong>526</strong></td>
<td><strong>729</strong></td>
<td><strong>13377</strong></td>
<td><strong>1054</strong></td>
<td><strong>1458</strong></td>
<td><strong>729</strong></td>
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</tbody>
</table>
### 1.4.11. Sub process – Budget Definition

| Key Objectives | ♦ Decide annual budget allocation for the R&D activities  
♦ Decide the leads for the annual budget allocation |
| Key Inputs | ♦ The total amount of funds available with the university for R&D related activities  
♦ The R&D budget utilization details for the previous year |

## Process description

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Description</th>
</tr>
</thead>
</table>
| **1. Requirement Gathering** | 1.1. The annual R&D budget definition exercise should start as per the budget guidelines taken from the Research targets and Research planning.  
1.2. The bottom-up budget approach should be adopted for allocating the annual R&D budget  
1.3. The School Deans should invite the budget requirements from the faculty. The faculties should analyze the annual requirements and prepare an interim budget, this can be based on  
- Previous year’s budget  
- Previous year’s budget utilization report  
- Expected projects  
- Planned improvement in the R&D facility  
1.4. The budget heads should be defined for  
- Conferences  
- Journals  
- Technical training/Research Training  
- Specialized R&D items  
- Patent filing  
- Software  
- Honorarium for RRC / RPC members (Research recognition committee / Research promotion committee)  
- Expenditure for conducting registration / progress seminars of PG and PhD |
| **2. Budget Submission & Review** | 2.1. The school should review the budget proposals submitted by the faculties  
2.2. In case of any discrepancy the school can refer the budget back to the faculties for changes. The faculties should re-submit the revised proposal within 2 days  
2.3. The final budget should be reviewed and signed by the Dean of School and submitted to Vice Chancellor for final approval  
2.4. The Dean R&D should review the budget and can seek clarifications before approval |
<p>| | |</p>
<table>
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<tbody>
<tr>
<td><strong>2.5.</strong></td>
<td>Any changes in the budget should happen with mutual discussion of Vice Chancellor, Deans, Finance committee and concerned faculty within 7 days</td>
</tr>
<tr>
<td><strong>2.6.</strong></td>
<td>The final approval for the budget should be sought from the Governing Body. The Governing Body/ Finance Committee can seek clarifications from Vice Chancellor before approval</td>
</tr>
<tr>
<td><strong>3. Budget Intimation</strong></td>
<td><strong>3.1.</strong> The budget approved for Research &amp; Development should be circulated by the Vice Chancellor</td>
</tr>
<tr>
<td></td>
<td><strong>3.2.</strong> The budget should be circulated to the Chief Research coordinator, Dean PG &amp; Research, School Research coordinators and the School Deans.</td>
</tr>
<tr>
<td><strong>4. Cross Utilization Approval</strong></td>
<td><strong>4.1.</strong> The prepared budget would have money allocated under various heads. There is a possibility that the budget allocated to a head would not be utilized. The cross utilization of budget should be permitted</td>
</tr>
<tr>
<td></td>
<td><strong>4.2.</strong> The cross utilization of budget should only be permitted within the department</td>
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<tr>
<td></td>
<td><strong>4.3.</strong> In case the re-allocation is less than 10% of the donor, approval from the Dean is required</td>
</tr>
<tr>
<td></td>
<td><strong>4.4.</strong> In case the reallocation is between 10% and 20% of the donor head, approval from Vice Chancellor is required</td>
</tr>
<tr>
<td></td>
<td><strong>4.5.</strong> In case the reallocation is greater than 20% of the donor, approval from the Vice Chancellor is required</td>
</tr>
<tr>
<td></td>
<td><strong>4.6.</strong> The school should prepare a record of all such cross utilization and send a copy to VC for filling the details of the cross utilization of the fund</td>
</tr>
<tr>
<td><strong>5. Utilization Report</strong></td>
<td><strong>5.1.</strong> At the end of the year the budget utilization report should be prepared in order to assess the fund status</td>
</tr>
<tr>
<td></td>
<td><strong>5.2.</strong> The utilization report of the R&amp;D budget should be prepared by the R&amp;D cell, with inputs from all the departments</td>
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<tr>
<td></td>
<td><strong>5.3.</strong> The utilization should be assessed on the basis of</td>
</tr>
<tr>
<td></td>
<td>- Utilization of the total R&amp;D Fund</td>
</tr>
<tr>
<td></td>
<td>- Utilization of fund within the department</td>
</tr>
<tr>
<td></td>
<td>- Utilization of fund under respective heads</td>
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<tr>
<td></td>
<td>- Any cross utilization of fund</td>
</tr>
<tr>
<td></td>
<td>- Fund performance as compared to the previous year</td>
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<tr>
<td></td>
<td><strong>5.4.</strong> In case of deviation in the school budget is more than 30%, a written explanation should be submitted to the Vice Chancellor by the Dean of the school.</td>
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<tr>
<td></td>
<td><strong>5.5.</strong> The budget for the next subsequent year should be prepared based on the budget utilization of previous year</td>
</tr>
</tbody>
</table>
| Key Outputs | ✦ R&D fund utilization report  
✦ Fund cross utilization report  
✦ Utilization deviation from previous year  
✦ % Utilization of R&D budget  
✦ % Utilization of budget School-wise / Head Wise |

### 1.4.12. Sub process – Research Proposals (Internal proposals)

| Key Objectives | ✦ Provide funding to the faculty and students to register for conference, journals and paper presentations, book chapter contribution, workshop, seminar, projects and external funding |
| Key Inputs | ✦ List of proposals from the faculty / students |

#### Process description

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1. Proposal Submission | 1.1. Standard format for the submission of proposal should be available on website, R&D cell and R&D coordinators  
1.2. Students and faculties should apply directly for attending the conference and publishing of research papers in international journals  
1.3. In case the paper is selected or the person is confirmed for attending the conference, a proposal should be submitted for necessary financial and other support. The support can be in terms of  
✦ Sponsorship to pay for the registration fees  
✦ Sponsorship for journal printing charges  
✦ Any leave required from the University to attend the conference  
1.4. The proposal should be submitted in a prescribed format to the School R&D coordinator and School Dean. The standard format for application is available on the website / R&D cell / Departments and the applications should only be submitted in the standard format. The following details should be present in the proposal  
✦ Budget  
✦ Acceptance letter  
✦ Conference / Journal name  
✦ Application in DST / AICTE format for conferences to be held abroad  
✦ Topic of Study  
✦ Impact factor of the journal  
✦ Location of travel, if required  
✦ Conference / Journal website details |
<p>| | |</p>
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<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication from Journal/ Organizing committee</td>
</tr>
<tr>
<td></td>
<td>Copy of the paper/ presentation</td>
</tr>
</tbody>
</table>

1.5. The University should pay extra incentive for selection of paper in a reputed journal with impact factor

1.6. The students should be given leave to participate in the technical festivals of premier engineering universities

1.7. The expense for attending the conference would also be paid by the institute based on the criteria mentioned in 2.2

2. **Proposal Evaluation**

2.1. The submitted proposals should be scrutinized before providing funding. R&D norms should be referred for scrutiny of the proposals

2.2. The R&D cell under the guidance of the Vice Chancellor should scrutinize the submitted proposals. The proposals should be scrutinized on the basis of

- R&D Norms
- Impact factor for the journal
- Recognition of the conference
- Speakers at the conferences
- Viewership of the journals

2.3. The proposals approved from the side of R & D cell, should be forwarded to the Vice Chancellor for final approval

2.4. In case of a conference at an international location, the approval from the Chairman is required. Also, the concerned faculty should submit the proposal to AICTE / DST for the travel grant

3. **Monitoring**

3.1. The records of the paper published in journals should be filed with the R&D cell. The following fields should be required to file the details:

- Name of the faculty/student
- Department
- Journal
- Impact Factor
- Topic of the paper
- Date/ Volume of publication
- Paper publication fee paid

3.2. The records for conferences should be filed with the R&D cell. The following fields should be required to file the details:

- Field of the conference
- Location
- Eminent speakers at the conference
- Trip expenses incurred for the faculty to attend conference
3.3. The R&D cell should collect the required information from the department. Each school has an R&D coordinator who coordinates the activities of the R&D cell with the department.

3.4. The publication should be tracked continuously and the performance should be compared with the previous year. The publication copy of the book/paper should be made available in the university library by R&D cell for future references. The proceeding copy should be available in School library.

3.5. The published copy of the book/paper should be made available in the university library for further reference. It should also be available with the school library. The concerned faculty/student should deliver a short presentation in the department.

<table>
<thead>
<tr>
<th>Key Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗ List of paper publication in journals</td>
</tr>
<tr>
<td>✗ List of faculties attended conferences</td>
</tr>
<tr>
<td>✗ Number of papers published in journals with Impact Factor</td>
</tr>
<tr>
<td>✗ Number of faculties attending international conferences</td>
</tr>
</tbody>
</table>

### 1.4.13. Sub process – Organizing Conferences

<table>
<thead>
<tr>
<th>Key Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗ To organize the conference in Schools in collaboration with Other Schools / outside organizations</td>
</tr>
<tr>
<td>✗ Enhancing internal and external collaboration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗ Conference proposal</td>
</tr>
<tr>
<td>✗ Identification of inhouse team (General Chair, Organizing Chair, Finance Chair, Publication Chair)</td>
</tr>
<tr>
<td>✗ External advisory committee</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Activities</strong></td>
</tr>
<tr>
<td><strong>1. Proposal Submission</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
1.3. Grants for organizing conference should be applied to funding agencies

1.4. A circular by UCRD must be floated to all deans for applying to the indexing agency. The proposal should be submitted by schools in a prescribed format to the UCRD. The following details should be present in the proposal:
- Budget
- Advisory Board
- Inhouse committee
- Acceptance letter from collaborators
- Conference / Journal name
- Indexing Agency Name
- Application in DST / AICTE format for conferences
- Website

<table>
<thead>
<tr>
<th>2. Proposal Evaluation</th>
<th>2.1. The submitted proposals should be scrutinized before sending to an outside funding agency. Only the quality proposals should be approved.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2. The UCRD under intimation to the Vice Chancellor should scrutinize the submitted proposals. The proposals should be scrutinized on the basis of</td>
<td></td>
</tr>
<tr>
<td>- R&amp;D Norms</td>
<td></td>
</tr>
<tr>
<td>- Quality Speakers</td>
<td></td>
</tr>
<tr>
<td>- Quality Reviewing Process</td>
<td></td>
</tr>
<tr>
<td>- Advisory Board</td>
<td></td>
</tr>
<tr>
<td>- Indexing agency</td>
<td></td>
</tr>
<tr>
<td>2.3. The proposals approved from the side of UCRD, should be forwarded to the Vice Chancellor for final approval</td>
<td></td>
</tr>
<tr>
<td>2.4. After approval from the indexing agency, the UCRD should closely monitor the progress on a weekly basis till the conference is hosted and till settlement of bills and expenses and submission of report.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Quality Check</th>
<th>3.1. The papers received must be scrutinized for quality content</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Unique contents 90% and more</td>
</tr>
<tr>
<td></td>
<td>- The Papers should be aligned with the theme of the conference</td>
</tr>
<tr>
<td></td>
<td>- More external papers should be encouraged</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Outputs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- List of paper publications</td>
</tr>
<tr>
<td></td>
<td>- List of faculties attended conferences</td>
</tr>
<tr>
<td></td>
<td>- List of Expert Speakers</td>
</tr>
<tr>
<td></td>
<td>- Extended papers for publication in journals</td>
</tr>
<tr>
<td></td>
<td>- Report of Conference</td>
</tr>
</tbody>
</table>

**Key Objectives**
- To amend the R&D norms as per requirements

**Key Inputs**
- Existing R&D norms
- Requirements for amendments

**Process Description**

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Description</th>
</tr>
</thead>
</table>
| **1. Inputs**  | 1.1. The R&D norms should be modified as and when required but not more than once in a year with intention to improve the quality of research  
1.2. There should be no constraints on the extent to which the R&D norms can be modified. However, the attempt should be to improve the quality of research  
1.3. The inputs to the amendments can be given by  
  - Dean of the school  
  - R & D cell  
  - R&D Coordinators  
  - Vice Chancellor  
  - National Advisory Board  
  - External Experts  
  - Other concerned stakeholders |
| **2. Final Approval** | 2.1. The amendments should be approved by the Governing Body through the Academic Council  
2.2. Once approved, the new R&D norms should come into effect  
2.3. The revised points should be added as a separate section and a reference date should be given for the change  
2.4. Copy of the revised R&D norms should be circulated to all the departments, faculties by the R&D cell |
<table>
<thead>
<tr>
<th>Key Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>✦ Revised R&amp;D norms</td>
</tr>
<tr>
<td>✦ List of changes into R&amp;D Norms</td>
</tr>
<tr>
<td>✦ Number of times the amendment is made in the norms in a year</td>
</tr>
</tbody>
</table>

### 1.4.15. Sub Process – Intellectual Capital

<table>
<thead>
<tr>
<th>Key Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>✦ Manage the papers/research material</td>
</tr>
<tr>
<td>✦ Provide papers / research material to the faculty and students</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>✦ Published papers</td>
</tr>
<tr>
<td>✦ Research material documented by faculty/students</td>
</tr>
</tbody>
</table>

### Process Description

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Knowledge Base Creation</strong></td>
<td>1.1. The papers published in the journals should be freely shared with the faculty/students in the university</td>
</tr>
<tr>
<td></td>
<td>1.2. The University should have common pool of papers available on the knowledge sharing database</td>
</tr>
<tr>
<td></td>
<td>1.3. The knowledge sharing database should be online and available on the University intranet</td>
</tr>
<tr>
<td></td>
<td>1.4. The database should have school wise / subject wise segregation of the papers and research materials</td>
</tr>
<tr>
<td></td>
<td>1.5. The students &amp; faculties should have permission to view and download the papers / research materials as required</td>
</tr>
<tr>
<td></td>
<td>1.6. The log of all the downloads should be maintained for future reference</td>
</tr>
<tr>
<td><strong>2. Material Collection</strong></td>
<td>2.1. The papers published in the journals should be collected by the R&amp;D cell from the school R&amp;D coordinators</td>
</tr>
<tr>
<td></td>
<td>2.2. The research material by the faculty should be submitted to the school R&amp;D coordinators</td>
</tr>
<tr>
<td></td>
<td>2.3. The papers should be submitted in hard copy as well as soft copy</td>
</tr>
<tr>
<td></td>
<td>2.4. The database for the following should be created with the R&amp;D Cell</td>
</tr>
<tr>
<td></td>
<td>✦ Database of publications of faculty and UG / PG students</td>
</tr>
</tbody>
</table>
### 3. Material Updation

- Database of the project funded externally by AICTE / DST / Any other agency

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>The papers / research materials should be put in the database for everyone to access</td>
</tr>
<tr>
<td>3.2</td>
<td>The database should be available on the intranet for anybody to access the papers / research material</td>
</tr>
<tr>
<td>3.3</td>
<td>The hard copy should be filed separately with the R&amp;D cell and a different file should be present for every department</td>
</tr>
</tbody>
</table>

### Key Outputs

- School wise / subject wise database of the papers/research material
- % papers / research material accessed by the faculty/students
- Number of clicks on the database in a given time frame

### 1.4.16. Sub process – External Collaboration

| Key Objectives | Collaborate with industry / R&D labs for consulting assignments |
| Key Inputs | Capabilities and skill set of the faculties in the university |

### Process description

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Getting Projects</td>
<td>1.1. The faculty can take consulting assignments from industry based on the capability and available skill set</td>
</tr>
<tr>
<td></td>
<td>1.2. The faculties can directly approach the companies or vice versa for getting the consulting assignments from the industry</td>
</tr>
<tr>
<td></td>
<td>1.3. The faculty should keep the head of the school in loop and keep him informed about the progress of discussion</td>
</tr>
</tbody>
</table>
1.4. The modalities related to project should be mentioned in the MoU
- Timelines for the project
- Scope of the project
- Cost of the project
- Facilities required from the university
- Faculty in-charge for the project
- Interim review dates

1.5. **The MoU should be signed by the representative of the company, faculty in-charge, Dean of the School and Vice Chancellor of the university**

2. **Facility Arrangement**

2.1. The facilities required for the project should be mentioned in the MoU for the consulting assignment (Refer 1.5)

2.2. The Head of the School along with the faculty should ensure that the requisite facilities are provided for the project

3. **Review & Completion**

3.1. The project work should be reviewed at interim dates as decided in the MoU

3.2. The Head of the Department, senior faculties of the school and faculty in-charge should be present for the review work

3.3. The interim report/final report should be submitted on the due date

3.4. The dates for the review and submission can be changed on approval of the client

4. **Revenue Split**

4.1. The revenue earned from the project should be received in the name of the university

4.2. A faculty fund should be created separately for each of the project and the rights to use the fund should vest with the faculty in charge of the project

4.3. The faculty fund can be used by the faculty for conference and other research work requirements. It should be completely at the disposal of the faculty in-charge
4.4. The revenue generated through the project should be distributed in a way
- 50% for the University for usage of the University Facilities.
- 40% for the faculty fund
- 10% for the administrative staff

**Key Outputs**
- Project Deliverables
- Project completion as per schedule

### 1.4.17. Sub process – Preparation of R&D Brochure

**Key Objectives**
- Publish R&D brochure

**Key Inputs**
- List of contents for the R&D brochure

**Process description**

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preparation of R&amp;D Brochure</td>
<td>1.1. The R&amp;D cell should publish a Research &amp; Development (R&amp;D) brochure by October first week every year.</td>
</tr>
<tr>
<td></td>
<td>1.2. The data regarding publications, Government funded projects including sponsored projects, consultancy projects; faculty as resources and details of reviewer, editor, session chair, and keynote speaker is to be maintained by the school R&amp;D coordinator.</td>
</tr>
<tr>
<td></td>
<td>1.3. Apart from this, departments conducting PG / PhD programs shall maintain the data regarding students registered for PhD, list of supervisors, 1-page summary of PG /PhD students.</td>
</tr>
<tr>
<td></td>
<td>1.4. The above information should be submitted by each Research coordinator to the R&amp;D cell by July end every year</td>
</tr>
<tr>
<td></td>
<td>1.5. R&amp;D cell would review the data submitted by all the departments and synchronize it properly in the form of brochure to be published</td>
</tr>
</tbody>
</table>
1.6. R&D cell should obtain budget approval for printing the R&D brochure

1.7. R&D brochure should be circulated to all departments and other stakeholders

<table>
<thead>
<tr>
<th>Key Outputs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• R&amp;D brochure</td>
</tr>
<tr>
<td></td>
<td>• Turnaround time for printing the R&amp;D brochure</td>
</tr>
</tbody>
</table>
Annexure – I: Format for SRC Meeting Notice (Agenda of Meeting)

**MEETING NOTICE**

**SCHOOL RESEARCH COMMITTEE**

<table>
<thead>
<tr>
<th>Name of the School</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minutes of</td>
<td>First/Second/Third/Fourth Meeting</td>
</tr>
<tr>
<td>Date &amp; Time</td>
<td></td>
</tr>
<tr>
<td>Venue</td>
<td></td>
</tr>
</tbody>
</table>

**AGENDA ITEMS**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction of SRC members &amp; Welcome address by the Chairman</td>
</tr>
<tr>
<td>2</td>
<td>ATR To confirm the minutes of the previous minutes meeting.</td>
</tr>
<tr>
<td>3</td>
<td>a</td>
</tr>
<tr>
<td></td>
<td>b</td>
</tr>
<tr>
<td></td>
<td>c</td>
</tr>
</tbody>
</table>

School Ph.D. Coordinator

Dean (Chairman-SRC)
Annexure – 2: Format for SRC Minutes of Meeting

SCHOOL RESEARCH COMMITTEE
MINUTES OF MEETING

<table>
<thead>
<tr>
<th>Name of the School</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minutes of</td>
<td>First/Second/Third/Fourth Meeting</td>
</tr>
<tr>
<td>Date &amp; Time</td>
<td></td>
</tr>
<tr>
<td>Venue</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.0 Executive Summary (150 to 300 words)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>2.0 Concluding Remarks (in bullets)</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Highlight 1</td>
</tr>
<tr>
<td>✔ Highlight 2</td>
</tr>
<tr>
<td>✔ Highlight 3</td>
</tr>
<tr>
<td>✔ Highlight 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.0 Agenda item wise Notes and Resolutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item No. 1</td>
</tr>
<tr>
<td>Notes</td>
</tr>
<tr>
<td>Resolution(s)</td>
</tr>
<tr>
<td>Item No. 2</td>
</tr>
<tr>
<td>Notes</td>
</tr>
<tr>
<td>Resolution(s)</td>
</tr>
<tr>
<td>Vote of Thanks</td>
</tr>
</tbody>
</table>

School Ph.D. Coordinator

Dean (Chairman-SRC)
Annexure- 3: Format for the approval of School Research Committee

FORMAT FOR THE APPROVAL OF SRC

School of ______________

Date:

To,
The Vice-Chancellor
Subject: Approval for Reconstitution of School Research Committee

Dear Sir,
We request you to kindly approve the following constituted members of the School Research Committee (SRC) for the school of ________________

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of Member</th>
<th>Designation</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Ex-officio and Chairperson</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Ph D/PG Coordinator of the School</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>SRC Member</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>SRC Member</td>
<td></td>
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<tr>
<td>5</td>
<td></td>
<td>SRC Member</td>
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<tr>
<td>6</td>
<td></td>
<td>SRC Member</td>
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<tr>
<td>7</td>
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<td>SRC Member</td>
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<td>8</td>
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<td>SRC Member</td>
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<tr>
<td>9</td>
<td></td>
<td>SRC Member</td>
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<tr>
<td>10</td>
<td></td>
<td>SRC Member</td>
<td></td>
</tr>
</tbody>
</table>

Reasons for reconstitution: ______________________________________________________

Thanking you,

Yours sincerely,

Forwarded

(Chairperson, SRC) (Name: ) (Dean- Research) (Name: ) (Name: )

Approved / Not Approved: _________________ VC
Format for Performance of the faculty publications School wise and Semester wise.

I. Research Publications

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the School</th>
<th>Category</th>
<th>Contributions from</th>
<th>Sub Total</th>
<th>% With respect to target</th>
<th>Per Faculty Publication for the semester</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Faculty</td>
<td>Ph D Scholars</td>
<td>UG/PG Students</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>SCI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SCOPUS Indexed</td>
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<tr>
<td></td>
<td></td>
<td>UGC Care</td>
<td></td>
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<tr>
<td></td>
<td>Total</td>
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<td>SCOPUS Indexed</td>
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<td>UGC Care</td>
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<td></td>
<td>Total University Publications</td>
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<td>SCOPUS Indexed</td>
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<td></td>
<td></td>
<td>UGC Care</td>
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</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
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</tr>
</tbody>
</table>
## II. Funded Research

<table>
<thead>
<tr>
<th>S N</th>
<th>Name of the School</th>
<th>Type of Funding Body</th>
<th>Level of Funding body (N/IN)</th>
<th>Name of the Funding Body</th>
<th>Sanctioned for the Period of</th>
<th>Sanctioned Amount (Lakhs)</th>
<th>Received Amount (Lakhs)</th>
<th>% With respect to target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sponsored Research</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Industrial Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students Internship Projects</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total (in Lakhs)**

<table>
<thead>
<tr>
<th>Total No. of Assignments</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>n</th>
<th>Sponsored Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Industrial Projects</td>
</tr>
<tr>
<td></td>
<td>Consultancy</td>
</tr>
</tbody>
</table>

**Total (in Lakhs)**

<table>
<thead>
<tr>
<th>Total No. of Assignments</th>
</tr>
</thead>
</table>

**Total University Funded Projects**

<table>
<thead>
<tr>
<th>Sponsored Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Projects</td>
</tr>
<tr>
<td>Consultancy</td>
</tr>
</tbody>
</table>

**Total (in Lakhs)**

<table>
<thead>
<tr>
<th>Total No. of Assignments</th>
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</table>

Page 40 of 236
### III. Consultancy

Every project internship must lead to consultancy and standard documents to be as per annexure must be signed by the concerned industry.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the School</th>
<th>Type of Consultancy</th>
<th>Level of Funding body (N/IN)</th>
<th>Name of the Organizing</th>
<th>Project Period</th>
<th>Consultancy Amount (Lakhs)</th>
<th>Received Amount (Lakhs)</th>
<th>% With respect to target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>Facilities</td>
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<tr>
<td>Total University Consultancy</td>
<td>Expertise</td>
<td>Facilities</td>
<td>Problem Solving</td>
<td>Total (in Lakhs)</td>
<td>Total No. of Assignments</td>
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</tr>
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</table>
### IV. Patents/Designs/Copyrights/ Authored Books/Edited Books and Book Chapters

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the School</th>
<th>Level</th>
<th>Patents</th>
<th>Designs</th>
<th>Copyrights</th>
<th>Authored Books</th>
<th>Edited Books</th>
<th>Book Chapters</th>
</tr>
</thead>
<tbody>
<tr>
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<td>International</td>
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<td>Books/Book Chapters</td>
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</table>
### V. Summary Outcomes of GU Research

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the School</th>
<th>Category</th>
<th>Contributions from</th>
<th>Sub Total</th>
<th>% With respect to target</th>
<th>Per Faculty Publication for the semester</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Faculty</td>
<td>Ph D Scholars</td>
<td>UG/PG Students</td>
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<td>SCOPUS Indexed</td>
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<td>UGC Care</td>
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<td><strong>Total</strong></td>
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### Table 1: Funding Details

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the School</th>
<th>Type of Funding body</th>
<th>Level of Funding body (N/IN)</th>
<th>Name of the Funding Body</th>
<th>Sanctioned for the Period of</th>
<th>Sanctioned Amount (Lakhs)</th>
<th>Received Amount (Lakhs)</th>
<th>% With respect to target</th>
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<td></td>
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<td>Students Internship Projects</td>
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### Table 2: Consultancy Details

<table>
<thead>
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<th>S. No.</th>
<th>Name of the School</th>
<th>Type of Consultancy</th>
<th>Level of Funding body (N/IN)</th>
<th>Name of the Organizing</th>
<th>Project Period</th>
<th>Consultancy Amount (Lakhs)</th>
<th>Received Amount (Lakhs)</th>
<th>% With respect to target</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Expertise</td>
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<td>S. No.</td>
<td>Name of the School</td>
<td>Level</td>
<td>Patents</td>
<td>Design s</td>
<td>Copyright s</td>
<td>Authored Books</td>
<td>Edited Books</td>
<td>Book Chapters</td>
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VI. Summary

<table>
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<tr>
<th>Funding agencies funded Research Projects</th>
<th>Total</th>
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</thead>
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<tr>
<td>Completed Research Projects</td>
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</tr>
<tr>
<td>#Projects Completed</td>
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</tr>
<tr>
<td>Total Grant</td>
<td></td>
</tr>
<tr>
<td>Ongoing Research Projects</td>
<td></td>
</tr>
<tr>
<td>#Projects Ongoing</td>
<td></td>
</tr>
<tr>
<td>Total Grant</td>
<td></td>
</tr>
<tr>
<td>Sanctioned Research Projects</td>
<td></td>
</tr>
<tr>
<td>#Projects Sanctioned</td>
<td></td>
</tr>
<tr>
<td>Total Grant</td>
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</table>

Institute funded Research Projects

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Completed Minor Research Projects</td>
<td></td>
</tr>
<tr>
<td>#Projects Completed</td>
<td></td>
</tr>
<tr>
<td>Total Grant</td>
<td></td>
</tr>
<tr>
<td>Ongoing Minor Research Projects</td>
<td></td>
</tr>
<tr>
<td>#Projects Ongoing</td>
<td></td>
</tr>
<tr>
<td>Total Grant</td>
<td></td>
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<tr>
<td>Sanctioned Minor Research Projects</td>
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<tr>
<td>#Projects Sanctioned</td>
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<tr>
<td>Total Grant</td>
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Research Publications

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<tbody>
<tr>
<td>Research Papers in Scopus / Web of Science / ABDC / EBSCO Listed Journals</td>
</tr>
<tr>
<td>Books Published</td>
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<tr>
<td>Book Chapters Published</td>
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<tr>
<td>Papers in Conference Proceedings</td>
</tr>
</tbody>
</table>
### 1.5. Funded Projects

#### 1.5.1 Sub Process – External Project Funding

<table>
<thead>
<tr>
<th>Key Objectives</th>
<th></th>
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<tbody>
<tr>
<td>▪ Every year the Dean/SRC shall have a target of submitting funding proposals worth minimum 2 Cr every year and minimum 1 Cr every semester.</td>
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</tr>
<tr>
<td>▪ The Dean/SRC shall have at least one active funding project for each divisional group exceeding a total fund amount of Rs. 30 Lakhs per school</td>
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</tbody>
</table>
per year and Rs. 20 Lakhs per year through interdisciplinary research projects, using the format shown in Appendix 1.2

- The Dean-Research and UCRD shall have at least one active funding project for each strategic research group exceeding a total amount of Rs. 150 Lakhs per semester, using the format shown in Appendix 1.3.

### Key Inputs

- To gather funding support for external funding

### Process Description

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project Submission</td>
<td>1.1 The various agencies of government publish advertisements in the newspaper / website for the funding of projects. The format for the proposal submission is published along with advertisement</td>
</tr>
<tr>
<td></td>
<td>1.2 The UCRD should gather the complete information on the project funding by the government as and when it is published. The information related to this could be</td>
</tr>
<tr>
<td></td>
<td>☺ The Project topic</td>
</tr>
<tr>
<td></td>
<td>☺ Scope of the project</td>
</tr>
<tr>
<td></td>
<td>☺ Expected deliverable</td>
</tr>
<tr>
<td></td>
<td>☺ Funding required</td>
</tr>
<tr>
<td></td>
<td>This list shall be updated at least once in six months and reported to URC. The complete list of all funding agencies shall be maintained and updated each academic year by each Dean/SRC and also with UCRD</td>
</tr>
<tr>
<td></td>
<td>1.3 The Dean/SRC of each school shall prepare, maintain and update the list of funding agencies relevant to the school to which no funding proposals had been sent, the list of funding agencies to which funding proposals had been sent but not yet approved, and the list of funding agencies from which active funding projects are being carried out.</td>
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<tr>
<td></td>
<td>1.4 The Chairs of strategic research group shall identify the funding agencies supporting interdisciplinary research and submit the list to Dean-Research and URC. They can also get a list from UCRD.</td>
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<td></td>
<td>1.5 The circular should be prepared by the R&amp;D cell and sent to Deans</td>
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<td>1.6 Deans should forward the circular to the faculty and students</td>
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<td></td>
<td>1.7 The faculty and students should be asked to submit the proposal at least 2 weeks before the final due date to the UCRD in the format as prescribed by the external funding agency</td>
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<tr>
<td></td>
<td>1.8 The faculty should go through the AICTE / DTE / DST / UGC / CSIR guidelines and prepare the proposal accordingly.</td>
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</tbody>
</table>
1.9 The project proposal should be submitted to the UCRD through SRC and the Vice Chancellor for forwarding. If required external expertise can be consulted prior to the submission

1.10 The approved proposal should be submitted to the concerned government agency for the project funding

| 2. Approval / Rejection | 2.1 The approval/rejection for the project comes to the Vice Chancellor
| | 2.2 The information on approval/rejection should be forwarded to the concerned school by Vice Chancellor
| | 2.3 In case of proposal approval, the faculty is required to make a presentation to the government agency for funding (if required)
| | 2.4 The date for the presentation is mentioned in the letter received from the funding agency
| | 2.5 Once the proposal is approved from the funding agency, the required facilities should be provided by the university
| | 2.6 The faculty should submit the complete details of the requirements to the R&D cell. These requirements should contain the following details:
| | - Duration of the project
| | - Lab required for the projects
| | - Expected amount of expenditure to be incurred for using university facility
| | - Manpower requirements
| | 2.7 The required details should be submitted to the Vice Chancellor for final approval
| | 2.8 The required facilities should be arranged for the faculty to execute the project with Vice Chancellor’s approval
| | 2.9 The Dean shall reduce the teaching load of principal investigator by 3 hours per week /co-investigator 2 hours per week in order to complete the funded project by deadline.

3. Review | 3.1 The funding agency requires continuous monitoring on the execution of the project. A progress report should be submitted at defined time intervals to the funding agency
| | 3.2 The internal reviews should be conducted before the progress report can be submitted to the agency by the committee headed by R&D cell, Dean of Concerned School and one subject matter expert from the respective school.
3.3 For internal review the deviations for the following heads should be taken into consideration:

- Budget
- Project duration /schedule
- Scope of the project
- Deliverables

3.4 The review report is sent to the external funding agency for further review.

3.5 The audit for the project should be performed during required time intervals (as defined by the agency) in order to keep a check on the defined duration / schedule and budget utilization of the project.

3.6 The audit report should also be submitted to the funding agency.

3.7 The R&D cell should recommend the incentive beneficiary (staff / faculty) reports through approval of the Vice Chancellor to accounts based on the grants availed during that financial year with reference to the R&D norms as applicable. For process around incentive payment, refer to “Miscellaneous Staff Payment” in “Finance & Accounts”.

4.5. The faculty members of the group which brings a funded research grant of not less than Rs. 10 Lakhs shall be given an incentive of a lump sum of 2.5% of sanctioned fund at the beginning and 2.5% of sanctioned fund at the completion of project by GU.

<table>
<thead>
<tr>
<th>Key Outputs</th>
<th>List of projects approved for the external funding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Utilization report for the project</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>KPIs</th>
<th>% Proposal approval by the funding agency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount of funding received by the university from the government agency</td>
</tr>
<tr>
<td></td>
<td>% Utilization of the funding</td>
</tr>
<tr>
<td></td>
<td>Project completion as per the schedule</td>
</tr>
</tbody>
</table>

In addition to the above policies, UCRD Team along with VC has privilege to enhance and modify the policies and issues the order as and when required.

1.6. Consultancy Projects:
Develop and establish consultancy policy for

- The Dean/SRC shall make a list of all potential industries for consultancy and submit to the Dean-Research/URC at the beginning of the academic year. All core industries of the school shall be included in the list.
The dean of the school must visit all industries related to his school in the NCR every year in the beginning of the financial year - April and explore possibilities of collaborations and consultancy / corporate turning opportunities available.

The Chairs of the strategic research group shall list all potential industries of interdisciplinary nature for consultancy and submit to Dean-Research/URC at the beginning of the academic year.

The Dean/SRC shall ensure that all professors and associate professors should have active consultancy projects with industries exceeding a total amount of Rs. 20 Lakhs per semester, using the format shown in Appendix 1.4.

The Dean-Research/URC shall ensure that at least one active consultancy project per strategic research group is being carried out with industries exceeding a total amount of Rs. 30 Lakhs per semester, using the format shown in Appendix 1.5.

The faculty member(s) having consultancy grant of not less than Rs. 2 Lakhs, shall be given an incentive of as according to the consultancy policy of GU.

The school shall support the faculty doing consultancy by providing on-duty leave when the faculty is required to go to the industry to provide consultancy, on prior permission from Dean/SRC/URC. It is expected that the concerned faculty must submit photo and MoM of the meeting after visiting concerned industry same day and ATR within next 7 days

Encouraging the faculty to utilize their expertise for consultancy services. The consultancy works can be categorized as:
- Software consultancy.
- Research based consultancy.
- Industrial consultancy
- Collaborative consultancy
- Extension activities
- Human resource development.
- Testing
- Any other suitable domain/area

In addition to the above policies, the Head of the institution has privilege to enhance and modify the policies and issues the order as and when required.

Consultancy Norms
The College shall extend expertise of faculty and R&D facilities to the outside agencies for providing solutions. The revenue generated out of consultancy shall be distributed among the concerned faculty and the supporting staff along with the share of the college as may be approved by the GB/BOM from time to time. The tentative distribution of the revenue generated out of consultancy shall be as given below.

| The University | 50 % |

In addition to the above policies, the Head of the institution has privilege to enhance and modify the policies and issues the order as and when required.
<table>
<thead>
<tr>
<th>Role</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC/PVC/Registrar/ Dean Planning</td>
<td>2%</td>
</tr>
<tr>
<td>Dean/ H.O.D.</td>
<td>2%</td>
</tr>
<tr>
<td>School consultancy in charge/ one who brought the Consultancy</td>
<td>2%</td>
</tr>
<tr>
<td>Faculty</td>
<td>40%</td>
</tr>
<tr>
<td>Lab Assistant</td>
<td>0.5%</td>
</tr>
<tr>
<td>Accountant/ CA</td>
<td>0.5%</td>
</tr>
<tr>
<td>UCRD Team / SRC</td>
<td>3%</td>
</tr>
</tbody>
</table>

1.7. Establishment of IPR and Innovation cell

It is the initiative by GALGOTIAS UNIVERSITY, GREATER NOIDA in administering intellectual property rights, to encourage and assist faculty members, staff, Undergraduate, Postgraduate students, Ph.D. Research Scholars and others associated with respect to their discoveries and inventions in a manner that is equitable to all parties involved.

The University recognizes the need for and desirability of encouraging the broad utilization of the results of research by scholars and acknowledges the importance of the patent system in bringing innovative research findings to practical application. The innovative research findings often give rise to patentable inventions even though the research was conducted for the primary purpose of gaining new knowledge. The faculty members, staff, Undergraduate, Postgraduate students, Ph.D. Research Scholars and others associated can contact GALGOTIAS UNIVERSITY, GREATER NOIDA patent cell for initiating the patent filing process as per the procedure mentioned in this document for their projects/inventions, etc.

Initiatives to enhance Patent Filing Activity with GALGOTIAS UNIVERSITY, GREATER NOIDA-UP

1. **GU Innovator of the Month Award**
   a. To promote research and innovation amongst Undergraduate, Postgraduate and in general in higher education, GALGOTIAS UNIVERSITY, GREATER NOIDA-UP has constituted “**GU Innovator of the Month Award**” for students of GALGOTIAS UNIVERSITY & respective schools.
   b. Awards shall be common for UG and PG
   c. A working implementation of either a concept, a process or a product idea with potential to commercialize, idea considered for the award.
   d. The projects judged on criteria such as:
      - Applications to society/National thrust area
      - Utility and scope in today’s context
e. The evaluation carried out in two levels:

Ø Level I: School level evaluation is done by a team of experts under the Dean of the concerned school. Three best projects in each area mentioned above are identified and forwarded for participation at university level. The students should clearly highlight the innovative aspects of their projects during this evaluation.

The details of projects selected at college level should be submitted to a team of experts constituted at University Level along with all the projects participated at college level along with evaluation process and judgment sheet duly signed by judges and principal.

Ø Level II: The team identifies the best innovative projects in each category for giving the award.

f. The award comprises of a certificate and cash prize (Rs. 2000/- at school level maximum limited to 5 every month in addition to project expenses

2. **Curricular Reforms**

Enhanced Industry Participation through involvement of Industry in following aspects was motivated:

- **Curriculum Design**
  - Every BOS and Focus Group has Industry Representation.

- **Content Delivery**
  - Specialized topics and units are being covered by Industry People.
  - STTP and Workshop are being jointly organized.

- **Mandatory Internships, Industry Visits and Guest Lectures**
  - Part of TAE; ensuring participation of all the students.

3. **Promotion of Research and Development**

The Research and Development activities which may lead to patent filing are encouraged by providing the following:

- Seed Money for R&D.
- Collaborative Research.
- Evaluation of Research by Industry People.
- Organization of Joint Conferences with Industry
- Many Research Scholars are working on industry-based problems with
- STTP in collaboration with Industries
- MoU’s with many industries for training and research collaboration.
4. **Initiatives for IPR**

- Patent Attorney for assisting patent filing activities
- Financial and technical support for patent filing activities
- Cash incentives for filing and grant of patent.
- Faculty sponsored to attend Training programmes on IPR at NIIPM
- Training programmes organized for students (UG, PG students and Ph.D. Scholars) by GALGOTIAS UNIVERSITY, GREATER NOIDA through ‘Research Methodology Workshops’
- Incentive of Rs. 10000/- will be awarded for international patent filing

1.8. **Entrepreneurship Development**

- Entrepreneurship Development Cell in place at Institute.
- Entrepreneurship Development’ subject part of curriculum to learn the need of Entrepreneurship, Identification of Business opportunities. Mechanisms of Product selection, Technology Assistance for Entrepreneurs, Technical and Commercial aspects of SSI Unit, Preparation of Project Report, Govt. Schemes and assistance, etc.
- Subjects on Project Management, Finance Management as Open Electives by MBA Department
- Promotion of Technology based Entrepreneurship through Best Innovation Awards with Prizes.
- EDP organized in collaboration with MCED with the core objective of providing self-employment to the students.
- Organization of ‘GU -idea’ Business Plan Competition Event

7. **Support for**

i. Mini, minor and Major projects are introduced.
ii. Project selection is through active industry participation.
iii. Multidisciplinary projects are encouraged. Industry is being involved in evaluation of Projects and Seminars of UG/PG/Ph.D. students.
iv. All project expenses (upto Rs. 1 Lac) related to fabrication of set up, testing, etc. borne by Institute

**Target: to be amongst top 5 in the year 2021 and top 3 amongst the listing in the Indian patent office annual report in the year 2022**

<p>| 1.1 | There shall be IPR cell at the university under UCRD led by in charge IPR cell |</p>
<table>
<thead>
<tr>
<th>1. Establishement of IPR cell and Patent Support</th>
<th>1.2 The project in-charges /coordinators of the schools shall work under Patent In charge of the university</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3 Patent Attorney should be appointed by the University as per the rate contract based on management / governing body for helping university students and staff for following</td>
<td></td>
</tr>
<tr>
<td>♦ Prior art search</td>
<td></td>
</tr>
<tr>
<td>♦ Patent Drafting</td>
<td></td>
</tr>
<tr>
<td>♦ Filing the patent with appropriate patent office and request for examination</td>
<td></td>
</tr>
<tr>
<td>♦ Examination and Publication of Patents</td>
<td></td>
</tr>
<tr>
<td>♦ Grant or Sealing of Patents with respect to oppositions</td>
<td></td>
</tr>
<tr>
<td>♦ Routine follow-up with patent authorities</td>
<td></td>
</tr>
<tr>
<td>♦ Informing applicants of actions required for maintenance of the application status</td>
<td></td>
</tr>
<tr>
<td>1.4 There shall be in-house portal for the submission of idea and best idea should be rewarded every month</td>
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</tr>
<tr>
<td>1.5 The Dean/SRC shall ensure that at least two patents are published/awarded from each divisional research group every semester.</td>
<td></td>
</tr>
<tr>
<td>1.6 The expenses involved in filing the patents and getting published shall be borne by the GU as according to the GU patent policy.</td>
<td></td>
</tr>
<tr>
<td>1.7 The 100% expenditure on patents must be by university, place of invention must be university and inventor’s affiliation must be university name and if found not to be considered as violation of code of conduct</td>
<td></td>
</tr>
<tr>
<td>1.8 The policy and format must be circulated by an email to all stakeholders. The norms related to financial support to file patents should be widely circulated among all stakeholders. The faculty members and students interested in filling the patent applications should approach the patent cell through guide and respective SRC</td>
<td></td>
</tr>
<tr>
<td>1.9 Detailed proposal in the desired format given by Patent Cell Office, India should be submitted to the UCRD</td>
<td></td>
</tr>
<tr>
<td>1.10 The patent data must be maintained as per the annexures</td>
<td></td>
</tr>
<tr>
<td>2. Increasing Patent Awareness</td>
<td>2.1 IPR in-charge along with school coordinators and deans of the school should take measures to increase the patent awareness among the students and faculties at university</td>
</tr>
<tr>
<td>2.2 School Dean shall ensure a one-day workshop on patent awareness at every class must be conducted. SRC committee shall ensure every</td>
<td></td>
</tr>
<tr>
<td>Semester Workshop for IPR</td>
<td>2.3 Approval on the proposal is taken from IPR and Vice Chancellor within 15 days.</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Division must be organized and students should be encouraged to write patent proposals and prior art search in the odd semester beginning of the session (within a fortnight)</td>
<td>2.4 Concerned faculty / students should be notified about the status of the proposal within 30 days of submission of the proposal</td>
</tr>
<tr>
<td>2.5 SRC through IPR cell should forward the approved proposal to the Patent Cell Office India through Patent Attorney. The concerned faculty / student should be in continuous touch with the Patent Cell Office for the status</td>
<td>3. Review of Projects</td>
</tr>
<tr>
<td>3.1 The project / research work undertaken by Undergraduate and postgraduate students should be assessed by respective school committees. The supervisor must write it shall lead to patent/ publication / product.</td>
<td>3.2 The Review committee should also have one member from the IPR cell (central team)</td>
</tr>
<tr>
<td>3.3 In case the project / research work has potential to become a patent, the IPR cell should provide guidance on the formalities to file for a patent</td>
<td>3.4 the R&amp;D cell to estimate the potential of the work to become a patent</td>
</tr>
<tr>
<td>3.5 The R&amp;D cell should maintain the records of all the project work filed for patents along with expenditures and dates of publication and examination</td>
<td>3.6 The innovation gallery to be established which should have information about all patents and prototype of the projects</td>
</tr>
<tr>
<td>4. Various stages for filing patent applications:</td>
<td>4.1 Submission of draft of patent application to GALGOTIAS UNIVERSITY, GREATER NOIDA IPR -Cell through Dean of concerned school. The draft can be submitted round the year, however, the meeting for scrutiny of applications will take place every Friday.</td>
</tr>
<tr>
<td>4.2 Each patent application should comprise the students and guide as inventors.</td>
<td>4.3 Scrutiny of applications based on quality of application.</td>
</tr>
<tr>
<td>4.4 Prior Art Search for the invention.</td>
<td>4.5 Draft modification in accordance with guidelines from Patent Attorney and Patent Office and submit it to GALGOTIAS UNIVERSITY, GREATER NOIDA Patent Cell.</td>
</tr>
<tr>
<td>4.6 Filing of patent application with appropriate patent office.</td>
<td>4.7 After filing the application for the grant of patent, a request for examination is required to be made by the applicant or by a third party and thereafter it is taken up for examination by the Patent office.</td>
</tr>
</tbody>
</table>
4.8 Usually, the First Examination Report is issued and the applicant is given an opportunity to correct the deficiencies in order to meet the objections raised in the said report.
4.9 The applicant must comply with the requirements within the prescribed time otherwise his application would be treated as deemed to have been abandoned.
4.10 hen all the requirements are met, the patent is granted and notified in the Patent office Journal.
4.11 However, before the grant of patent and after the publication of application, any person can make a representation for pre-grant opposition.

<table>
<thead>
<tr>
<th>5. Applicati on Proforma</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Full name, nationality and address of applicant(s): GALGOTIAS UNIVERSITY, GREATER NOIDA- UTTAR PRADESH, INDIA</td>
</tr>
<tr>
<td>5.2 Full name, nationality and address of inventor(s): Students and faculty</td>
</tr>
<tr>
<td>5.3 Title of the invention: it must describe your invention in one sentence or few words.</td>
</tr>
<tr>
<td>5.4 Technical field of the invention: ex. which stream of Engineering or Non-Engineering science or technology your invention is related to.</td>
</tr>
<tr>
<td>5.5 Prior art: what is the existing technology available in the field relating to your invention and disadvantages in that technology which are overcome by your invention.</td>
</tr>
<tr>
<td>5.6 Object: Reason and advantages of your invention over existing technology must be mentioned.</td>
</tr>
<tr>
<td>5.7 Synopsis: similar to the synopsis written for journals and scientific articles.</td>
</tr>
<tr>
<td>5.8 Brief description of drawings (if any): if any figures are given to describe the invention only numerals must be used on it and what numerals denote must be described here. Ex figure 1 denotes “----- where 1 show ----, 2 shows---- etc.</td>
</tr>
<tr>
<td>5.9 Detail description of the invention: describe in detail about the invention under this heading</td>
</tr>
<tr>
<td>5.10 Best method of performance of the invention: preferably in one to two paragraphs mentioning the process in which invention is performed by giving example.</td>
</tr>
<tr>
<td>5.11 CLAIMS: mention specific and novel features of your invention which you need to protect.</td>
</tr>
<tr>
<td>5.12 Abstract: basic idea about your invention in one paragraph</td>
</tr>
<tr>
<td>5.13 Drawings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Dos and Don’ts for filing patent applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 For all applications for patent filing, it is mandatory that the list of Inventors should include names of all projectees/ group students, project/mini project guide necessarily.</td>
</tr>
<tr>
<td>6.2 No press release or any such activity should be undertaken by the Inventors prior or after patent filing till grant of patent.</td>
</tr>
</tbody>
</table>
6.3. For all patent applications filed GALGOTIAS UNIVERSITY, GREATER NOIDA will act as applicant and the faculty/students will act as Inventors.

6.4. For all faculty members, staff, Undergraduate, Postgraduate students, Ph.D. Research Scholars and others who wish to file patent application through GALGOTIAS UNIVERSITY, GREATER NOIDA, the place of Research/project/mini project, etc. should be GALGOTIAS UNIVERSITY, GREATER NOIDA mandatorily.

6.5. The Inventors should submit undertakings mentioning above points to IPR Cell.

| Key Outputs | ▪ Records of project work filed for patents  
▪ No of ideas from an individual (students/ faculties filed for patents) |
| KPIs | ▪ Number of research work filed for patent by the university faculty/students  
▪ % Patents ideas accepted  
▪ No of patents filed/ published/granted year wise |

In addition to the above policies, Head of the institution has privilege to enhance and modify the policies and issues the order as and when required

1.9. GU’s Policy for funding Research
1. For reputed international conference paper presentation, a travel grant shall be approved by UCRD through the recommendation of Vice Chancellor (subject to condition of fulfilment of all documentation and conditions laid down by the UCRD)
2. *50% fees concession shall be given in the tuition fees towards Ph.D. for in-house faculties who have completed one-year minimum service at GU and shall be given only till the faculty is in full time employment.*

3. *From the very beginning, the University encouraged young faculty to conduct research. Thus, it has opened a scheme for providing financial assistance to Minor Research Projects. According to this scheme, a faculty member prepares a Minor Research Project, which is submitted to a committee at School/University level and on the recommendations of this committee the University gives financial assistance to the faculty concerned. It is also mandatory to submit a quarterly progress report of such a Research Project to the UCRD for this purpose, every year the University earmarks the financial budget for each school. Each school shall be given a seed grant of Rs. 1 Lakhs/year.*

### 1.9.1. Sub process – Seed Funding

#### Key Objectives

- Provide seed funding to the faculty for R&D projects related to PG / Doctoral studies

#### Key Inputs

- Seed funding proposals

#### Process description

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Providing Seed Funding</td>
<td>1.1. Only the proposal submitted to external agencies like AICTE / UGC/DST etc. should be eligible for seed funding</td>
</tr>
<tr>
<td></td>
<td>1.2. The proposals submitted to the external agencies should be forwarded to the R&amp;D cell</td>
</tr>
<tr>
<td></td>
<td>1.3. The concerned faculty shall give a presentation before the committee comprising of Vice Chancellor, R&amp;D cell members, Concerned School Dean and one subject expert outside of the university.</td>
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<tr>
<td></td>
<td>1.4. During the presentation it is expected to give the details about the project, its utility to the industry &amp; society, research outcome etc.</td>
</tr>
<tr>
<td></td>
<td>1.5. The committee should give the remarks and accordingly the proposal shall be forwarded to the Chairman for final approval</td>
</tr>
</tbody>
</table>

#### Key Outputs

- List of submission for seed funding
- List of projects provided seed funding

#### KPIs

- List of projects accepted for seed funding
1.10. Awards & Recognition

The University would like to encourage quality research in different thrust areas. For this purpose, outstanding research contributions done by faculty, researcher, and research scholar shall be recognized. Therefore, the University shall prepare a scheme for providing incentive to researchers and scholars. The incentives are identified as under:

- Incentive in terms of money
- Incentive in terms of awards/prizes
- Incentive in terms of certificate or giving more weightage for the career advancement scheme, etc.

At the beginning of every year research awards will be distributed for all the faculties and students. The award will give after the details being collected from the Research coordinators of each school. The awards will be based on the incentive policy defined by the UCRD team approved by Vice Chancellor and endorsed by the Hon Chancellor. During December of every year, reports of publications (journals, conference, patent, chapter, and book) of faculty will be collected for the particular year and during January of next year awards will be given.

### 1.10.1. Sub process – Awards & Recognition

| **Key Objectives** | Provide incentive to faculties/students to perform research-oriented work
| | To increase publication and visibility in international journals and conferences
| **Key Inputs** | The grants available with the university
| | External grants secured
| | List of papers published along with the impact factor of the journal
| | List of the patents filed
| | List of Consultancy assignment secured
| | Citations of the faculties

| **Process description** | **Key Activities** | **Description** |
| 1. Awards | 1.1. The special awards / incentives should be available for  
| | ♦ PhD completed scholars  
| | ♦ Faculties doing projects under government grants  
| | ♦ Papers published in journals with high impact factor  
| | ♦ PhD guidance (Students from Galgotias University)  
| | ♦ High quality research  
| 2. Incentives | 2.1. Faculties involved in projects with external funding should be given extra incentives on the amount of grants.  
| | 2.2. Cash rewards / incentives may be given to the faculty with publication in a journal of impact factor subject to the approval of a committee comprising of Vice Chancellor, UCRD and two visiting subject experts.  
| | 2.3. Incentives may be given to the faculty under whom the candidates have completed PhD or to the faculties who have guided GU faculties for Doctoral Research (PhD) for the period of maximum three years  
| | 2.4. For citation of papers under the affiliation of Galgotias University, an amount of INR 1000/10 citations will be awarded. The citations will be measured using Scopus; it should not include self-citations. Award amount to be shared if more than one author publishes the paper and in proportion for first author to last author. there shall not be more than 4 authors for a paper.  
| | 2.5. Attending STTP/FDP in the category ‘A’ institutes of National Importance shall be provided with on duty + 100 % registration fee  
| | 2.6. Grants received from External funding such as AICTE/ GoI etc.  
| | Faculty-5% on grants  
| | School Dean-2% on grants  
| | School Research Coordinator - 1% on grants  
| | Central Research Coordinator - 1% on grants  
| | VC/PVC - 1% on grants  
| | 2.7. For Patent filing, Registration fees, University will take care. Filing the copyright - Registration fee (100%)  
| | Ph.D. Supervisor - On award of Ph.D. degree - Rs. 10000/-  
| | 2.8. Convenor of conference in the university at international level indexed in Scopus - Any School - Rs. 10,000/-  

2.9. Authored Book/ Edited Book/Book Chapter with Scopus indexed
   - For Faculty - Rs. 5,000/ Rs. 8,000/ Rs. 2000/

2.10. Seed money - Prior approval by management - Rs. 2.5 to 5 Lakh

2.11. Funded Project - Category (in Lakhs) upto 10/20/30/30 and above
   Rs.2 5,000/ Rs. 50,000/ Rs. 70,000/ 10% of the principal amount

### Key Outputs

- List of faculties eligible for extra incentive
- Amount of money given as extra incentive
- Number of faculties getting felicitated

<table>
<thead>
<tr>
<th>Level</th>
<th>SCOPUS (Free)</th>
<th>SCI/ SCIE (free)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All UG courses</td>
<td>2000</td>
<td>5000</td>
</tr>
<tr>
<td>All PG Two-year courses like MTech/ MCA / MSc / MBA</td>
<td>-</td>
<td>5000</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Faculty</td>
<td>-</td>
<td>5000</td>
</tr>
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</table>

1.10.2. Incentivizing the Faculties and Students for winning Awards & Recognitions / Resource Person:

The information about the highly reputed National/ International Awards/ Recognition from Government and Non-Government Agencies and as Resource Person (Session Chair/ Keynote Speaker/ Advisory Board/ Board of industry) / Innovation / Research / Academic Excellence / Research / Entrepreneurship / Others if not covered under any of the above category has to be called from all faculties and students. After verification of the same following incentives shall be given:

1. The Top 2 faculties and top 2 Students from each school shall be rewarded quarterly
2. Every Achievement shall be on university website & provided with Certificate of Honor
3. Best 20 entries from university shall have Commendation, medal and monetary incentive at a University function annually and shall be placed in GU Prospectus and Newsletters.
4. Incentive of Rs. 10000/- will be awarded for international patent filing
1.10.3. Mandate for Postgraduate Students/ PhD Scholar

i. It is mandatory to undertake dissertation work pertaining to live industrial problems/cutting edge technologies.

ii. They are required to refer to minimum 5 journal/transaction papers for finalizing the topic for dissertation.

iii. Monthly progress seminars are conducted to assess the work.

iv. External experts are being called for the evaluation of the quality of the work during the year & at the time of topic selection.

v. Before submission of the final dissertation, students are required to publish one review and one implementation paper in a reputed international conference/journal indexed in Scopus/ SCI.

vi. The PG students project dissertation needs to have the following before the index.
   a. Details of the conference/Journal/Special call for papers
   b. The accepted paper
   c. The acceptance letters
   d. Plagiarism Report

vii. Above supports applicable for the conference listed in annexure 1 & 2 only

viii. 100% financial assistance for developing the experimental setups for the dissertation work.

ix. Plagiarism check for thesis/research paper before submission.

1.10.4. Rules for Getting Support for UG(Student)/PG(Student)/PhD (Scholar)/Faculty Members:

i. Participating students all have to submit an application complete in all respect forwarded by departmental URC coordinators & Dean to URC cell in charge with following enclosures.
   ♦ Leaflet of conference/seminars showing Venue, date & Registration fee.
   ♦ Full paper/project report/concept note
   ♦ Original Tickets
   ♦ For — On spot competitions participation reports to be submitted.
   ♦ Certificate of Participation.
   ♦ Plagiarism report

All are encouraged to participate in hackathons, innovation contests, workshops, seminars, paper presentation and project competitions. Winners are provided with 100% financial assistance as regards registration fees and travelling expenses. Everyone needs to get prior permission to participate in the event to know the authenticity of the contest.

URC cell shall hold it meeting every week for discussions on the research proposals and further processing of those. Faculty members/ Students with any innovative idea, project; can interact with members of the URC cell after the meeting every week.
1.11. Research at Ph.D. Level

i) Students are encouraged to submit research proposals to external funding agencies on the topic of their research along with a guide.

ii) Financial assistance shall be provided for experimental work, purchase of books/equipment and publishing the research papers in journals and conferences.

iii) Students are required to submit six monthly progress reports and a future plan of work.

iv) Students shall be sent to IITs/NITs for their knowledge up-gradation.

v) Patent awareness program is regularly arranged.

vi) Plagiarism check for thesis/research paper before submission.

vii) Before submission of the final dissertation, students are required to publish two papers in reputed international journal indexed in Scopus/SCI.

viii) The University shall further boost doctoral research. It shall also recognize the worthy R&D organizations for doctoral research and build bridges with them.

ix) The University shall continue to encourage faculty and research scholars to get funding for attending international conferences from external agencies so that the quality in research paper can be maintained. It shall urge research scholars to publish and patent their research work.

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1. RRC working</td>
<td><strong>1.1.</strong> The PG scholars should submit the synopsis to the concerned PG coordinator as per the timelines in the academic calendar</td>
</tr>
<tr>
<td></td>
<td><strong>1.2.</strong> The RRC should be formed and should comprise of R&amp;D Cell, Concerned School Dean, Vice Chancellor ’s nominee and one external subject expert</td>
</tr>
<tr>
<td></td>
<td><strong>1.3.</strong> R&amp;D cell should prepare a schedule of RRC meetings for all the PG courses within 1 month of the submission of synopsis. RRC meeting of each PG course is to be conducted as per the schedule for the concerned department</td>
</tr>
<tr>
<td></td>
<td><strong>1.4.</strong> Approval of synopsis or some changes as recommended by RRC are communicated to concerned School Head by R&amp;D cell along with the dates</td>
</tr>
<tr>
<td></td>
<td><strong>1.5.</strong> In case of changes in the synopsis, concerned student should submit the revised synopsis duly signed by guide and forwarded through School Head by the date mentioned by R&amp;D cell</td>
</tr>
<tr>
<td></td>
<td><strong>1.6.</strong> For assessment of the project refer to the “Evaluation Process of PG Student” in “Continuous Student Assessment” process document.</td>
</tr>
</tbody>
</table>
1.7. For the final assessment, R&D cell should provide a panel of examiners in consultation with Head of School and Vice Chancellor to Controller of Examination for external evaluation of PG dissertation thesis

2. Research Promotion Committee

2.1. The Research Promotion Committee is formed by the R&D cell and should comprise of
- Dean R&D
- Concerned Head of Department
- Supervisors
- One external subject matter expert from reputed institutes

2.2. The responsibility of the RPC should comprise of conducting pre-submission seminars for the PhD and ME by Research students, conducting pre-submission seminars and evaluating the students on it.

| Key Outputs | List of approved synopses by RRC |
| KPIs | % Of synopsis approved by RRC |

1.11.1. 10.14: Sub process – Quality Improvement Program (QIP)

| Key Objectives | To improve the quality of faculty and education at the University |
| Key Inputs | Guidelines for the QIP project by the government of India |

<p>| Process description |
| Key Activities | Description |
| 1. QIP Application | 1.1 It is a Government of India initiative. Under this the faculty of institute can pursue PG / PhD program at designated QIP centers with fellowship |
| | 1.2 The Government of India comes out with advertisement and this should be circulated by R&amp;D cell to all the faculty members |
| | 1.3 The faculty members willing to apply for the program should fill the form and send it for approval to the Vice Chancellor |</p>
<table>
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<tbody>
<tr>
<td><strong>1.4</strong> Once approved from the Vice Chancellor, the faculty can submit the form to the QIP section of Government of India</td>
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</tr>
<tr>
<td><strong>2. QIP Centers</strong></td>
<td><strong>2.1</strong> The prescribed format for applying as QIP center is available on the AICTE website</td>
</tr>
<tr>
<td></td>
<td><strong>2.2</strong> The form can be downloaded and filled by the institute. It should be submitted to AICTE along with supporting documents and the signature of the Vice Chancellor.</td>
</tr>
<tr>
<td></td>
<td><strong>2.3</strong> In case the QIP center is granted, the institute can advertise to invite applicants for QIP program at the institute and run the program as per AICTE guidelines for QIP centers</td>
</tr>
<tr>
<td><strong>Key Outputs</strong></td>
<td><strong>KPIs</strong></td>
</tr>
<tr>
<td>✦ List of faculties applying for QIP</td>
<td>✦ Faculties selected for QIP program</td>
</tr>
</tbody>
</table>
## 1.11.2. Sub process – Accreditations of Laboratories

### Key Objectives
- Enhance the reputation of the University by seeking for national & international accreditations of laboratories

### Key Inputs
- Target List of National & International accreditations

### Process Description

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Accreditations</strong></td>
<td>1.1 The university should look for national and international accreditations of courses / institutes / laboratories to enhance the reputation</td>
</tr>
<tr>
<td></td>
<td>1.2 Vice Chancellor should appoint a Quality Assurance Cell that can comprise of</td>
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<td></td>
<td>o Dean Academics</td>
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<td></td>
<td>o Dean Student Activities</td>
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<tr>
<td></td>
<td>o Chief Coordinator, Training</td>
</tr>
<tr>
<td></td>
<td>o Dean R&amp;D</td>
</tr>
<tr>
<td></td>
<td>o Head of concerned Departments</td>
</tr>
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<td></td>
<td>o Lab in charges</td>
</tr>
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<td></td>
<td>1.3 The target list of national and international accreditations should be decided at least 1 month before the commencement of the academic session.</td>
</tr>
<tr>
<td></td>
<td>1.4 This target list should be formed once the requirements for the accreditations are studied in detail. Self-evaluation report should be prepared to see the present status and any improvement required to achieve accreditations</td>
</tr>
<tr>
<td></td>
<td>1.5 In case the facilities at the university are similar to that required for accreditations, the university can apply for accreditations by performing the required formalities</td>
</tr>
<tr>
<td></td>
<td>1.6 University can also rope in a professional agency to guide university on getting accreditations</td>
</tr>
<tr>
<td></td>
<td>1.7 The committee should under see the preparations required to be performed for the accreditation inspection</td>
</tr>
<tr>
<td></td>
<td>1.8 Once the accreditation is granted the necessary professional fees can be paid to the accreditation agency.</td>
</tr>
</tbody>
</table>
1.9 Constant monitoring should be done by the Accreditation committee to ensure that facilities in the university are at the level desired by the accreditation agency

<table>
<thead>
<tr>
<th>Key Outputs</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>List of national and international accreditations</td>
</tr>
<tr>
<td></td>
<td>Requirement of facilities desired by the various accreditation agencies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KPIs</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Number of accreditations applied</td>
</tr>
<tr>
<td></td>
<td>% Applications accepted for accreditation</td>
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</table>

### 10.10: Sub process – Continuing Education Programs (CEP)

<table>
<thead>
<tr>
<th>Key Objectives</th>
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<tbody>
<tr>
<td></td>
<td>Conduct training programs for faculty, students and industry personnel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Inputs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>List of CEPS to be conducted by the departments</td>
</tr>
<tr>
<td></td>
<td>Distribution of revenue and incentive for the faculty</td>
</tr>
</tbody>
</table>

### Process Description

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1. CEP Planning | 1.1 Every school should plan to conduct a Continuing Education Program (CEP). The faculty members of the school should submit the CEP details to CEP In-charge and should comprise of:  
- Name of course  
- Tentative dates  
- Other related details  
1.2 Yearly CEP calendar is prepared by CEP In-charge and uploaded on a website for inviting registrations. The interested participants can register online or fill the registration form manually at the institute.  
1.3 If the registered participants are greater than a threshold count (as decided by the Vice Chancellor), then only the CEP will take place. Otherwise, it can be rescheduled  
1.4 The budget for the CEP should be prepared taking into consideration  
- Honorarium of the outside experts  
- Honorarium of in-house experts  
- Laboratory sessions  
- Other operational expenditure |
<table>
<thead>
<tr>
<th>1.5 Once the registrations are above the threshold level, approval for the program is taken from the Head of concerned department, CEP In-charge and Vice Chancellor at least a week before the commencement of the CEP. The approval is related to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Budget (As per the guidelines laid down by the institute)</td>
</tr>
<tr>
<td>o Registration fees per candidate</td>
</tr>
<tr>
<td>o Information brochure / certificate</td>
</tr>
<tr>
<td>o Duration</td>
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<tr>
<td>o Other related details</td>
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</tbody>
</table>

| 2. CEP Conduction | 2.1 The CEP is conducted as per approved timelines by the respective department |

<table>
<thead>
<tr>
<th>1. CEP Summary &amp; Clearances</th>
<th>3.1 School should submit the CEP summary report to CEP In-charge within 3 days of completion of the CEP program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.2 The financial clearances related to expenses and advances etc. should be taken from finance school within 3 days of completion of the CEP. The school through the Head of School should take these clearances from CEP In-charge and Vice Chancellor. For submission and processing of finances for CEP refer “Miscellaneous Activities” in “Finance &amp; Accounts” Process Documents</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Outputs</th>
<th>▪ List of approved, conducted CEP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>▪ List of attendees of CEP</td>
</tr>
<tr>
<td></td>
<td>▪ Expenses for the CEP</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>KPIs</th>
<th>▪ Number of registrations for CEP</th>
</tr>
</thead>
</table>

Appendix 1.1
### Faculty's Research Performance Report

#### Name of Faculty Member:

#### Designation:

#### School:

#### Whether PhD or Not:  

#### Expected Completion:

#### If not a PhD, mention date of enrollment & institute name:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Performance Indicators</th>
<th>Minimum</th>
<th>Acceptable</th>
<th>Exceeding</th>
<th>Target for the Year</th>
<th>Min Expected Level</th>
<th>Achievement 2018</th>
<th>Remarks</th>
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<tr>
<td></td>
<td></td>
<td>Jan/Feb</td>
<td>Mar</td>
<td>Apr</td>
<td>May/Jun</td>
<td>Jul/Aug</td>
<td>Sep/Oct/Nov/Dec</td>
<td>Cumulative</td>
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<td></td>
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</tr>
<tr>
<td>1</td>
<td>Papers in refereed journals</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1/semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Conference proceedings</td>
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<td></td>
</tr>
<tr>
<td>3</td>
<td>Books Chapters</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1 in 1 year</td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>Books written</td>
<td>0</td>
<td>0.25</td>
<td>1</td>
<td>1 in 1 year</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

### Funded Grants / Projects

#### Research Grants

- **Proposals submitted**
  - Numbers
  - Value (Rs.)
  - 1/ Semester

#### Research Grants Received

- Numbers
- Value (Rs.)
- 1 in 1 year

### Consultancy

#### Funded Consultancy

- **Proposals submitted**
  - Numbers
  - Value (Rs.)
  - 1/ Semester

#### Consultancy Assignments Received

- Numbers
- Value (Rs.)
- 1 in 1 year

### Patents

#### Number of Patents filed

- 1
- 1
- 2
- 1 in 1 year

#### Number of Patents granted

- 1 in 1 year

### Supervision

#### Number of PhD Scholars supervising

- > 1

#### Number of PhDs completed

- 1/1 year

---

**Signature of Faculty Member:**

**Faculty Name:**

**Date:**

**Signature of Dean:**

**Name of Dean:**

**Date:**
### Appendix 1.2

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Name of Divisional Research Group</th>
<th>Name of Principal Investigators/ Co-investigators</th>
<th>Name of Funding Agency (Govt./Non-Govt.)</th>
<th>Starting Date of Funding project</th>
<th>End Date of Funding project</th>
<th>Amount of Funds</th>
<th>Signature of Dean/HOD</th>
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</thead>
<tbody>
<tr>
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<td>DRG - 1</td>
<td>PI: Co-PI-1: Co-PI-2:</td>
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<td></td>
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</table>

**Total amount of Funds for the Academic Year**

### Appendix 1.3

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Name of Strategic Research Group</th>
<th>Name of Principal Investigators/ Co-investigators</th>
<th>Name of Funding Agency (Govt./Non-Govt.)</th>
<th>Starting Date of Funding project</th>
<th>End Date of Funding project</th>
<th>Amount of Funds</th>
<th>Signature of Dean-Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SRG - 1</td>
<td>PI: Co-PI-1: Co-PI-2:</td>
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<td>PI: Co-PI1:</td>
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<tr>
<td>2</td>
<td>SRG - 2</td>
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</table>

**Total amount of Funds for the Academic Year**
### Appendix 1.4

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>DRG</th>
<th>Name of Principal Consultant/Co-Consultants</th>
<th>Name of Industry for Consultancy (Govt./Non-Govt.)</th>
<th>Starting Date of Consultancy</th>
<th>End Date of Consultancy</th>
<th>Amount of Funds</th>
<th>Signature of Dean-Research</th>
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Total amount of Funds for the Academic Year

### Appendix 1.5

<table>
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<tr>
<th>Serial No.</th>
<th>SRG</th>
<th>Name of Principal Consultant/Co-Consultants</th>
<th>Name of Industry for Consultancy (Govt./Non-Govt.)</th>
<th>Starting Date of Consultancy</th>
<th>End Date of Consultancy</th>
<th>Amount of Funds</th>
<th>Signature of Dean-Research</th>
</tr>
</thead>
<tbody>
<tr>
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<td>PC: Co-C-1: Co-C-2:</td>
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</table>

Total amount of Funds for the Academic Year
### Appendix 1.6

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>SRG/DRG</th>
<th>Name of Patent Inventors</th>
<th>Title of Patent</th>
<th>Date of Patent Filing</th>
<th>Date of Patent Publishing</th>
<th>Signature of Dean-Research</th>
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<tbody>
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<td>1</td>
<td>SRG - 1</td>
<td>Inventor 1: Inventor 2:</td>
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<td>DRG - 1</td>
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</table>

Total number of patents =

### Appendix 1.7

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Title of Corporate Training</th>
<th>Name(s) of Faculty given corporate training</th>
<th>Industry/Agency through corporate training</th>
<th>Number of Trainees</th>
<th>Revenue generated in Rupees</th>
<th>Signature of Dean-Research with Date</th>
</tr>
</thead>
</table>

Total Revenue Generated =

### Appendix 1.8

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Name of the Industry/Agency/Academic Institutions signing MoU</th>
<th>Domain/Area of Activity</th>
<th>Start Date of MoU</th>
<th>End Date of MoU</th>
<th>Signature of Dean-Research with Date</th>
</tr>
</thead>
<tbody>
<tr>
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Chapter 2: Center of Excellence

**Aim:** Establishing a Center of excellence in cutting age technologies which should have strong linkages with research organizations and minimum 2 to 5 industries. Minimum 5 undergraduate projects, 5 Post graduate projects and few Ph.Ds. must work at the same and it should train and create manpower in the same domain for tomorrow. It must be interdisciplinary in nature to begin with breakout sessions and SWOC analysis should be done for the expertise available and cutting age technologies.

2.1. **Introduction:**

- A center of excellence using an industrial laboratory refers to a team and a shared facility that provides leadership, best practices, research, support and training for a focus area of research and development with advanced technologies provided by industry. This shall bring together faculty members from different disciplines, fast learner students and technical experts from industry and provide shared facilities. It should engage in capacity building for the enhancement of training, research and development. The CoE using industrial laboratories should focus on new and emerging technologies, should be multidisciplinary and should aim in developing technological skills of students for industry and creating entrepreneurship skills of students.

- The university must identify the professors who can take up responsibility to establish the CoE in the one of the cutting age technologies. The preference shall there shall be two in charges and both from different domains and disciplines.

- The center must be in the area of the thrust areas of the nation and needs of the industry

- The process can be initialized by professors or by School dean or as per instructions of higher up. The white paper including vision mission short goals and long-term goals, industries working in the same domain, consent from the advisory board members from industries and international community not less than 6 must be there with at least 50 projects of various levels (undergraduate / postgraduate / Ph.D.).

2.2. **Salient Features of a Center of Excellence:**

- The Centre of Excellence (CoE) is expected to be a collaborative activity between a team of high-quality researchers in the institution and researchers or research-users in several companies or organizations. In cases where the nature of research is related to production or improvement of public goods, collaboration may include appropriate public agencies.

- The Centre should focus on new and emerging technologies, multidisciplinary and translational research relevant to national development goals. Alternatively, The CoE shall promote key areas identified under the CoE guideline such as

  - Big Data,
  - Biomedical engineering/healthcare
  - Cloud Computing,
  - Internet of Things (IoT),
Machine Learning, Artificial Intelligence,
Cyber Security,
Clean-Tech,
Edu-Tech,
Agri-Tech,
Healthcare
Additive manufacturing
drone technologies
ARVR
Smart Grid
Satellite communications
Design
Robotics
smart Structures
energy, water, clean environment, smart materials
and other areas of social or national importance.

2.3. Process of setting up CoE
This can be done by
1. Spending from the university fund for establishing the laboratories (The industry may not support by establishing a lab but may support in all ways by expertise, projects internships, technical support and so on) CoE need not be out of the industry lab only. The CoE may be established by university professors and have strong industry connect and from bank of experts from the school and partnering industry the consultancy grants assignments are availed and trained manpower for the future industries are created and projects are undertaken an International and national collaborations, strategic partnerships and networks should be utilized by CoE. For this purpose, at least two MoUs should be signed in pursuing long term relationships every year.

2. Establishing lab under CSR fund of the industry
3. Establishing the lab in partnership with industry in certification trained manpower and intellectual property sharing
   ➢ Each school shall set up at least one CoE using industrial laboratories by collaborating with advanced and emerging technologies-based industries.

   ➢ The CoE using industrial laboratories should prepare the format of the proposed budget as shown in Appendix 2.1.

   ➢ The CoE should scale up UG, PG and Ph.D. program enrollments in the identified areas. The format for recording the scaling up of these program enrollments over years is shown in Appendix 2.2.
The CoE shall be self-sustainable in long run but in initial period, should be funded by the university and industry initially and staffed for full time operation with dedicated resources, such that new projects shall be carried out.

COE should have Skilled staff
- Recruitment of subject matter and development experts
- Part-time consultants
- Adjunct Faculty

The CoE should undertake following but not limited to
- Guide UG projects
- Guide PG projects
- Guide PhD with industry associate
- Organize one conference per year in the area sign 5 MoU with the industries working in the same domain set up an advisory board having experts from industry and international academia in the same domain. COE shall have advisory board upto 6-10 industry persons from R and D organizations
- Organize summit minimum one in each semester offer 5 internships per month
- Organize 365 days training to corporates, and university staff and students to train and create the manpower in the cutting age technology along with industry partners and students’ team shall work on industrial problems and consultancy assignments
- COE using industrial laboratories should attract funding from various agencies and consultancies such that it shall be self-sustaining after initial support from university.
- CoE should have at least five funded projects in the focus areas in a year from government /non-government agencies with collaboration from industry.
- CoE should also provide at least five consultancies in a year to industries based on the developed expertise of team members.
- To have strong technical expertise, technical positions shall be advertised with the job description and such hired technical experts should be given well defined roles.
- COE shall train round the year training to the faculties and students in the various areas allied with the COE and performance of them to be assessed as per enclosed format
- Develop training modules, provide training and certification. The capacity building should be carried out by training eligible faculty and fast learning students in a continuous and sustained manner.
- Conduct research activities such as modeling and development of new trending technology or its deployment in association with industry.
- Keep track of ongoing projects along with a record of knowledge building, such as new methodologies and leading innovations developed in various technical domains.
A project progress review committee shall be set up which should review and keep a record of the project activities as shown in Appendix 2.5 and submit a report to VC, every month.

Improvement in research and development facilities such as Procurement of equipment, hardware and software from industry, Procurement of components and subsystems from industry

Testing and prototype development

Target for CoE is defined in code of conduct of the university

2.4. Organizational structure of CoE using Industrial Lab

The CoE shall have a Center Head and depending on the number of identified technical domains, a number of Division Heads corresponding to each domain, shall work and coordinate the activities of CoE. Under each division, there will be members who jointly participate in training, research and development in the focus area of CoE. A Center Head (CH) shall be appointed by the university, who shall be a senior and experienced faculty member who will oversee the activities of CoE using an industrial laboratory.

2.5. Roles and Responsibilities of Center Head/Division Heads of the CoE using industrial laboratory

1. CH must develop the organizational structure of Center of Excellence by identifying the important domains, the functions of the division heads and members.

2. Must do sufficient ground work through discussion with all division heads and members and prepare the survey before taking up the agenda points with Industry for different meetings.

3. In the formation state, the center head must specify the thrust areas of R & D and prepare the list of resources required to establish the laboratory with industrial equipment and hardware and software components with the proposed budget shown in Appendix 2.1, by collaborating with industry.

4. CH must maintain the list of the persons involved in collaboration from industry and their roles & responsibilities.

5. CH shall initiate meeting with Industry and ensure the preparation of minutes of meeting which shall contain the action points and deadlines at least once in a month.

6. CH should conduct meetings with division heads and members to update the status of progress and make the minutes of meetings once in two weeks.

7. CH must monitor and maintain the progress of tasks of the center in association with division heads and must update VC and management at least once in a month.

8. CH should consolidate the progress report of the center and give/present reports to VC and others at least once in two months.

9. CH should prepare the schedule of visit of R & D experts from Industry to the center of excellence at GU and prepare the minutes of outcomes of each visit.

10. CH along with division heads, should make industry resource persons to get involved in the design and development, and document their contribution.

11. CH should clearly state the outcomes/deliverables of the center and display it
12. CH should make sure that the progress of R&D to be displayed in the center and to be updated at least once in two weeks.
13. CH should set up and receive feedback from the project progress review committee every four months as per the format shown in Appendix 2.5
14. CH should maintain a list of funding projects submitted and stage of review process as per the format shown in Appendix 2.6. This should be updated once in three months.
15. DH should monitor the work progress of each member in the center
16. DH should keep track of latest research trends and industry development in the areas of R & D
17. DH should give special presentation on the research trends in the areas of interest
18. Every Saturday the CoE team must meet and read out latest projects and publications for 6 hours minimum

2.6. Roles and Responsibilities of members of CoE using Industrial Laboratory

The CoE using industry laboratory comprises center head, division heads and members who are faculty members from GU, fast learner students and experts from Industry. A faculty member whose research area falls in line with the theme of center of excellence should be a member of the center. A regular Ph.D. scholar working in the focus area of CoE, should also be a member of a center with the approval of VC. Any fast learner student who has knowledge and skills in the focus area of CoE should also be a member of CoE. The main functions of the members are given below.

1. Members shall carry out the R & D activities in the center.
2. Members should acquire the skill on software and equipment for research and development purposes. They should take up the training program given by industry professionals to get trained in the use of the latest equipment.
3. Members who are GU faculty should propose and organize training programs for academicians and industry people.
4. Members who are GU faculty should enroll GU students in the R & D activities
5. Members should develop projects. At least fifteen projects should be completed in CoE every year.

2.7. Role of Industry

1. Students who do projects with CoE using industrial laboratories shall do project work in the industry to have real life work experience and understand the current industry trend.
2. Industry shall give the list of projects along with titles.
3. Industry should ensure that the good quality projects are given to students and students must understand the project as a whole although they shall be given a part of the major project.
4. At least 50% of GU students shall be absorbed by the industry on their successful completion of the project.
5. GU students who do internship with industry shall be given stipend by the industry.
6. There shall be coordination between the guide from Industry and guide at GU to assess the progress of the students efficiently.
7. The criteria for eligibility of students and selection process for students to do projects shall be given by industry and the eligible students shall be selected by the industry at GU campus.
8. GU shall give NOC to selected students to do projects in the industry with the permission from industry.
9. Industry expert lectures shall be given by industry at least twice in a semester
10. Contests of hackathon shall be conducted by industry in association with GU twice per year.
11. Joint conferences shall be conducted by GU in association with industry at least once in a year.
12. Curriculum suggestions shall be given by industry to GU at least once in a year.
13. GU shall give capability enhancement to industrial members of CoE using industrial laboratories, by offering advanced courses to them.
14. Train the Trainer program shall be conducted by the industry to train GU faculty members to lead activities that reinforce learning in the advanced emerging technologies. The industry shall also evaluate the trainer to ensure their readiness to teach in turn to all students.

2.8. Identification of thrust areas of research and development:
Identification of thrust areas of research and development relevant to center of excellence and execution of projects in those areas

1. Meeting of the GU team with the industrial team of CoE, for identification of thrust areas and standard format for submitting project shall be done by Centre Head.
2. Invitation for projects in thrust areas by GU faculty and students of CoE as acceptable by the industry be carried out by Center Head by:
   a. Sending emails and putting notices in GU campus (one week).
   b. Submission of projects (two weeks)
   c. Compilation of summary of projects for screening (one week)
3. Screening and evaluation of submitted projects by expert team comprising GU and industrial members:
   a. Accept/reject/ suggestion for modification by evaluation team (two weeks)
4. Final revised submission of selected projects by GU faculty and students and selection team shall be:
   ● Communicating results to applicants
   ● Getting revised projects resubmitted (one week)
   ● Evaluation of revised projects based on modification suggested (one week)
5. Review of project progress every two months by expert team comprising GU and industrial members (2 GU faculty members of CoE + 1 senior staff from accounts + 2 industrial experts):
   ● Notice of meeting to investigators
   ● Presentation by project team
   ● Comments by evaluation team
   ● Rating project progress by evaluation team (one week for all activities)
6. On submission of completed projects, outcome evaluation shall be carried out by an expert team comprising GU and industrial members, by using rubrics for projects.

2.9. Expected Outcomes

The CoE are expected outcomes as mentioned below.

- Trained manpower as per the requirements of the industry
- At least 10 students placed in first out of those who are doing projects in the associated industries which are having tie up with CoE
- Five active funding projects and five consultancies in a year
- Publications in reputed journals and conferences, patents, and intellectual property rights (IPR) with at least 10 reviewed peer journals, two patents in a year and one IPR in two years.
- Two entrepreneurs from CoE every year
- 10 Internships of 6 months and 50 internships of one month in a year
- Guide 5 UG projects every year
- Guide 5 PG projects
- Guide 2 PhD with industry associate
- Organize one conference per year in the area
- Sign 5 MOu with the industries working in the same domain
- Organise summit minimum one in each semester
- 100 staff to be trained for 40 hours
- 5 consultancy assignments

2.10. Checklist

- The CoE using industrial laboratory’s proposed budget summary over each financial year using the format shown in Appendix 2.1 Details of the school involved in the proposal using the format shown in Appendix 2.3
- Details of the CoE using IL using the format shown in Appendix 2.4.

Appendix 2.1

Budget summary for each financial year:

<table>
<thead>
<tr>
<th>SN</th>
<th>Activity</th>
<th>Equipment</th>
<th>Consumables</th>
<th>Manpower</th>
<th>Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>₹</td>
<td>₹</td>
<td>₹</td>
<td>₹</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>₹</td>
<td>₹</td>
<td>₹</td>
<td>₹</td>
</tr>
<tr>
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<td>₹</td>
<td>₹</td>
<td>₹</td>
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<td>4</td>
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<td>₹</td>
<td>₹</td>
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<tr>
<td>5</td>
<td></td>
<td>₹</td>
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<td>₹</td>
</tr>
<tr>
<td>6</td>
<td>Operation and Maintenance</td>
<td>₹</td>
<td>₹</td>
<td>₹</td>
<td>₹</td>
</tr>
</tbody>
</table>
### Appendix 2.2
Program enrollments related to CoE in UG, PG and Ph.D. programs:

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Name of the program</th>
<th>Enrollments in Academic year 2018-19</th>
<th>Enrollments in Academic year 2019-20</th>
<th>Enrollments in Academic year 2020-21</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

### Appendix 2.3
Details of the school involved in the proposal

<table>
<thead>
<tr>
<th>School Information</th>
<th>Name of the School under which the CoE is proposed</th>
<th>Other Schools Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>External Recognition of Excellence of Proposing School</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>External Recognition of Excellence of Proposing School</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Awards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Publications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Patents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Citation Index</td>
<td></td>
</tr>
<tr>
<td></td>
<td>National Partnerships with the School in or related to the research area proposed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>International Partnerships with the School in or related to the research area proposed</td>
<td></td>
</tr>
<tr>
<td>Total Students</td>
<td>Undergraduate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Research</td>
<td></td>
</tr>
</tbody>
</table>
### Current Faculty Strength

<table>
<thead>
<tr>
<th>% Of Faculty having Ph.D.</th>
</tr>
</thead>
</table>

### Appendix 2.4
Details of CoE using IL

<table>
<thead>
<tr>
<th>Centre of Excellence</th>
<th>Name of the center to be Established</th>
<th>Thematic Area of the proposed Centre</th>
<th>Total Project Estimate</th>
<th>Funding Expected from External Agencies</th>
<th>Gap funding required from the University (Seed Funding)</th>
<th>Social Relevance of the activities of the proposed Centre</th>
<th>How does the Centre promote Sustainable Development</th>
<th>Quality of faculty in terms of credentials and achievements to be associated with the center.</th>
<th>No of MS/Ph.D. likely to work in the proposed center.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>₹</td>
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</tbody>
</table>

### Appendix 2.5
Project Progress Review

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>On-going Funding Projects</th>
<th>Hardware Cost – Acquired yes/no</th>
<th>Software cost Acquired yes/no</th>
<th>Title of Technical report and deliverables to agency</th>
<th>Stage of project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
### Appendix 2.6

List of funding projects proposed for submission:

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Title of Proposed Funding Project</th>
<th>Name of Principal Investigator</th>
<th>Proposed project budget in Lakhs</th>
<th>Review stage of project submission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
Professional Society membership
All the faculty members are required to enroll in the International Technical Society (Engineering & Non-Engineering). It's mandatory to all. As part of Promoting Research and Publications, Research Funding Projects UCRD recommends Galgotias University Faculty Members to be part of at least 01 of the Professional body’s societies related to your domain with name of Galgotias University affiliation. Kindly register yourself and this will increase our global presence among the research communities.

Membership dues shall be reimbursed as per the following criteria
- 2 years’ work experience at GU:
  - 25% Fee will be reimbursed for AP/ Associate Professor
  - 50% Fee will be reimbursed for Professor.

Society should be international and we are recommending some professional bodies
- IEEE – The world’s leading professional association
- ACM – Association for Computing Machinery
- CSI – Computer Society of India
- ISTE – Indian Society for Technical Education
- IEININDIA – Institute of Engineers (India)
- NISB – NIE- IEEE student branch
- SAE – Society of Automotive Engineers
- ISHRAE – Indian Society of Heating, Refrigerating and Air Conditioning Engineers.
- INBA- Indian National Bar Association
- Indian Tourism & Hospitality Congress-Lifetime Member
- World Chef Choice Federation-Lifetime Membership

Free Membership
- IANEG -International Association for Engineers
- ISDS Society- International Society for Development and Sustainability
- The IRED - The Institute of Research Engineers and Doctors
- IEDRC - International Economics Development and Research Centre
- ABA-American Bar Association
The process mentions the steps involved in allocating projects to students, continuous monitoring of progress of the project and evaluation using rubrics, program outcome meets code of conduct and targets

### 3.1. Introduction:

In addition to communication, team work and research skills, each student should attain at least the following learning outcomes:

- Demonstrate a depth of knowledge of Mechanical Engineering.
- Complete an independent research project, resulting in at least a thesis publication, and research outputs in terms of publications in high impact factor journals, conference proceedings, and patents.
- Demonstrate knowledge of contemporary issues in their chosen field of research.
- Demonstrate an ability to present and defend their research work to a panel of experts.

### 3.2. Types of projects and quality metrics

#### 3.2.1. Allocation of projects

- Appointment of the project coordinator
- The project coordinator shall request the students to form a group of 2-4 members and identify the project area/title along with the consent from faculty/industry professionals who shall guide them and collect these details from the students at least two weeks before the start of the VII-the semester.
- The Dean /Head shall provide the list of faculty members and their area of specialization to the students at least one month before the start of the VII-the semester.
- The students of a project group shall be formed by the Dean/ Head /project coordinator with students from weak, average and bright student categories and also looking at gender ratio
- The Dean/ Head /project coordinator shall finalize project titles; guide and project team of students and display the allocation at least one week before the start of the VII-the semester.
- The Dean/ Head /project coordinator shall also allocate project laboratory resources for in-house projects and allocation of number of days per week for doing projects in the industry for projects carried out in industry.
- The Dean/ Head /Project coordinator shall list the types of projects and identify each project with a particular type from this list.

#### 3.2.2. Continuous Monitoring and evaluation

- A committee for evaluation team to be set up which shall have expert from each area to be there to evaluate the project falls in their area
● the targets to be set by each guide whether outcome of the project is going to be patent / publication/ product
● once done it must be monitored in each month's review and dean has to ensure the targets are met for the school
● The Dean/ Head /project coordinator/project guide shall prepare PBL based project design according to the format shown in **Appendix 4.1**.
● The Dean/ Head /project coordinator/project guide shall keep track of PBL based project progress by filling up the format shown in **Appendix 4.2**.
● The Dean/ Head /project coordinator/project guide shall make a unit planner based on the questions of **Appendix 4.1**, as shown in **Appendix 4.3**.
● As part of formative assessment and summative assessment the format of **Appendix 4.4** shall be used to evaluate the performance of students in project work by Dean/ Head /project guide, every month
● The Dean/PC/Project guide shall evaluate the contribution towards the attainment of program outcomes of the project at the end of semester as shown in **Appendix 4.5**.
● In assigning the marks in Pos and PSOs attainment in Appendix 27.5, the rubrics shown in **Appendices 4.6 – 4.10**, shall be used by the Dean/ Head /Project guide.
● The quality metric of the project is defined as the average of the scores of POs and PSOs attainment. If the averages of these are above 3, then the quality of the project is in between the acceptable and exceptional category. The Dean/PC/Project Coordinator should ensure that at least 90% of the projects secure an average greater than 3 out of 4.
● Students write their respective dissertations after conducting the fieldwork/ library work and the project report is presented after due checking the similarity index which should not exceed 25% for undergraduate students.
● Progress is continuously monitored by the supervisor and periodically project evaluation committee in the form of PPT presentations. Assessment of projects is done considering factors such as:
  (i)  their quality,
  (ii) the state-of-the-art technology used in execution,
  (iii) their relevance to society, industry and academics,
  (iv) the use and development of theoretical and experimental methods, and
  (v) the coverage of broader areas of the pharmacy.
● Faculty uses Rubrics for the assessment of projects for the internal assessment. Final evaluation of the project report is conducted in a formal set up where the external examiner appointed by the university takes the viva.

**3.2.3. Outcomes of the projects such as papers, products, awards, etc.**
● Dean/ Head /Project Coordinator shall continuously monitor and encourage students to submit papers, make complete usable products and apply for awards by making them participate in project competitions as appropriate for the projects.
● Dean/ Head /Project Coordinator shall prepare the outcomes of the projects in terms of these activities as shown in Appendix 26.5 of mandate # 26.
### 3.2.4. Rubrics for Project Evaluation:

<table>
<thead>
<tr>
<th>Review #</th>
<th>Major Component for</th>
<th>Evaluation Parameters</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Review</strong></td>
<td>Project scopes and proposal</td>
<td>Literature review</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project relevance</td>
<td></td>
</tr>
<tr>
<td><strong>Second Review</strong></td>
<td>Methodology and expected outcome of the proposed work</td>
<td>Implementation methodology</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expected outcomes</td>
<td></td>
</tr>
<tr>
<td><strong>Final Review</strong></td>
<td>Technical achievement</td>
<td>Innovative contribution</td>
<td>30</td>
</tr>
<tr>
<td>(External)</td>
<td></td>
<td>Use of proper tools</td>
<td></td>
</tr>
<tr>
<td><strong>Project Report Evaluation</strong></td>
<td>Quality of project report</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Description of concepts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Knowledge of contemporary issues</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conclusion and future scopes</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix 3.1

#### PROJECT DESIGN: OVERVIEW

<table>
<thead>
<tr>
<th>Name of Project:</th>
<th>Duration:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject/Course Name (if any):</th>
<th>Faculty:</th>
<th>No. of Credits:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Other subject areas to be included, if any: | |
|---------------------------------------------| |

### Need to Knows: Key Knowledge and Understanding

<table>
<thead>
<tr>
<th>Success Skills</th>
<th>Critical Thinking/Problem Solving concepts:</th>
<th>Self-Management (Individual work):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Collaboration (team work):</th>
<th>Other:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Project Summary

(Include student role, issue, problem or challenge, action taken, and purpose/beneficiary)

### Driving Question

#### Products

<table>
<thead>
<tr>
<th>Individual:</th>
<th>Specific content and competencies to be assessed:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Team:</th>
<th>Specific content and competencies to be assessed:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### PROJECT DESIGN: OVERVIEW

<table>
<thead>
<tr>
<th>Making Products Public</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Include how the products will be made public and who students will engage with during/at end of project)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources Needed</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On-site people, facilities:</td>
<td></td>
</tr>
<tr>
<td>Equipment:</td>
<td></td>
</tr>
<tr>
<td>Materials:</td>
<td></td>
</tr>
<tr>
<td>Community Resources (if any):</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reflection Methods</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(How individual, team, and/or whole class will reflect during/at end of project)</td>
<td></td>
</tr>
<tr>
<td>Journal/Learning Log</td>
<td>Focus Group</td>
</tr>
<tr>
<td>Whole-Class Discussion</td>
<td>Fishbowl Discussion</td>
</tr>
<tr>
<td>Survey</td>
<td>Other:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Notes:</th>
<th></th>
</tr>
</thead>
</table>
## Project:

### Driving Question:

<table>
<thead>
<tr>
<th>Final Product(s)</th>
<th>Learning Outcomes/Targets</th>
<th>Checkpoints/Formative Assessments (Reviews)</th>
<th>Instructional Strategies for All Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations, Performances, Products and/or Services</td>
<td>knowledge, understanding &amp; success skills needed by students to successfully complete products</td>
<td>to check for learning and ensure students are on track</td>
<td>provided by teacher, other staff, experts; includes scaffolds, materials, lessons aligned to learning outcomes and formative assessments</td>
</tr>
</tbody>
</table>

(Individual **and** team)
## Appendix 3.2

### Unit Question

For the faculty: A question that helps initiate and focus the inquiry  
For the student: A question that creates interest and a feeling of challenge and guides the project work

<table>
<thead>
<tr>
<th>Products</th>
</tr>
</thead>
</table>

| Public Audience  
(Experts, audiences, or product users’ students will engage with during/at end of project) |
| --- |

| Knowledge and Skills  
What knowledge and/or skills are going to be used to enable the student to respond to the unit question? |
| --- |

| Resources and Materials Needed  
What resources are available to us?  
How will our classroom environment, local environment and/or the community be used to facilitate students’ experiences during this unit? |
| --- |

| Multiple Means of Representation  
- What different teaching methodologies will we employ?  
- How are we differentiating teaching and learning for all? Have you considered those with special educational needs?  
- How will students know what is expected of them? Will they see examples, rubrics, templates, etc.?  
- How will we know if the students have enough prior knowledge? |
| --- |

| Multiple Means of Expression  
- How will students acquire the knowledge and practice the skills required? How will they practice applying these?  
- How will students demonstrate their learning? |
| --- |
Multiple Means of Engagement
- How do we help students engage and keep their interest in learning?

Reflection Methods
How individual, team, and/or whole class will reflect during/at end of project?

<table>
<thead>
<tr>
<th>Observational</th>
<th>Essays</th>
<th>Surveys</th>
<th>Discussions</th>
</tr>
</thead>
</table>

Appendix 3.3

**Unit Title:** One that engages student enquiry

<table>
<thead>
<tr>
<th>Subject/Course:</th>
<th>Teacher(s):</th>
<th>Grade Level:</th>
<th>Total Duration of the Unit (in hours):</th>
</tr>
</thead>
</table>

Other subject areas to be included, if any:
(For cross-curricular PBL)

**Core Competency Focus**

Which Core Competency/Competencies will be my focus?

<table>
<thead>
<tr>
<th>Subject(s)</th>
<th>Big Ideas</th>
<th>Curricular Competencies</th>
<th>Curricular Content</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What are the big ideas from the new curriculum?</td>
<td>What are curricular competencies from the new curriculum?</td>
<td>What are curricular content from the new curriculum?</td>
</tr>
</tbody>
</table>

PBL Unit Planner
Assessment
What am I looking for? How will I know the students have achieved these goals? How will we use formative assessment to give students feedback during the unit? Include project rubric(s) and an assessment plan so that students know how they will be assessed.

<table>
<thead>
<tr>
<th>Rubric(s)/Assessment Activity</th>
<th>Curricular Connections</th>
<th>Formative or Summative?</th>
<th>Individual or Group?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scenario
Scenario within which the project will take place

Challenge
A description of task as it is presented to the students

Appendix 3. 4

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Components of evaluation</th>
<th>Weightage out of 50</th>
</tr>
</thead>
</table>
| Zero-th review         | Need to Knows
Driving Question and Project Description                                                | 5                   |
| First review           | Success Skills
Units Questions and Assessment of learning of units                                        | 15                  |
|                        | Voice and Choice, Critique and Revision                                                  |                     |
| Second review (Final review) | Products Developed
Verification of Project Objectives                                                     | 30                  |
|                        | Presentation to Public Audience
Quality of report                                                                          |                     |
|                        | **Total**                                                                               | **50**              |

A project work assigned to students covers almost all the POs.
## Appendix 3.5

<table>
<thead>
<tr>
<th>Programme Outcome</th>
<th>Programme Outcome Description/Assessment Instrument</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Engineering knowledge:</strong> Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td><strong>Problem analysis:</strong> Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td><strong>Design/development of solutions:</strong> Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td><strong>Conduct investigations of complex problems:</strong> Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td><strong>Modern tool usage:</strong> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td><strong>The engineer and society:</strong> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td><strong>Environment and sustainability:</strong> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.</td>
<td>4</td>
</tr>
<tr>
<td>8.</td>
<td><strong>Ethics:</strong> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td><strong>Individual and team work:</strong> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings</td>
<td>4</td>
</tr>
<tr>
<td>10.</td>
<td><strong>Communication:</strong> Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.</td>
<td>4</td>
</tr>
<tr>
<td>11.</td>
<td><strong>Project management and finance:</strong> Demonstrate knowledge and understanding of the engineering and management principles and apply these</td>
<td>3</td>
</tr>
</tbody>
</table>
to one’s own work, as a member and leader in a team, to manage projects and in multidisciplinary environments

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>12.</strong></td>
<td><strong>Life-long learning:</strong> Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.</td>
<td>3</td>
</tr>
<tr>
<td>PSO 1</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>PSO 2</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>
### Appendix 3.6
**Rubrics for Program outcome # 9: Individual and Team work performance**

<table>
<thead>
<tr>
<th></th>
<th>Unacceptable (1)</th>
<th>Marginal (2)</th>
<th>Acceptable (3)</th>
<th>Exceptional (4)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Workload and time management</strong> skills</td>
<td>Planning</td>
<td></td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contributes to the project</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Team Dynamics</strong></td>
<td>Decision Making</td>
<td></td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Problem Solving</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technical Knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communications skills</strong></td>
<td>Written Communications</td>
<td></td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oral Communications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OVERALL</strong>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>
# Appendix 3.7

Non-technical Constraints of Program outcome # 3

<table>
<thead>
<tr>
<th>Non-technical constraint</th>
<th>Examples of relevant questions</th>
<th>Score or N/A</th>
</tr>
</thead>
</table>
| Economic                 | - Is a development cost considered?  
                          | - Is a production cost considered? | 1  2  3  4  N/A |
| Environmental            | - Does the project use environmental-friendly products?  
                          | - Is the impact of the project to the environment considered?  
                          | - Are resources being used properly and efficiently? | 1  2  3  4  N/A |
| Social                   | - Is the impact of the project to the society considered? | 1  2  3  4  N/A |
| Political                | - Does the project follow the government guidelines or laws? | 1  2  3  4  N/A |
| Ethical                  | - Are there any foreseen potential conflicts with a profession’s Code of Ethics arising from the development of the project? | 1  2  3  4  N/A |
| Health and Safety        | - If the safety issue should be concerned, does the project discuss about it?  
                          | - Are there relevant health effects that are affected by this project? | 1  2  3  4  N/A |
| Manufacturability        | - Can the project be built?  
                          | - How can the project be designed to eliminate manufacturing errors?  
                          | - How can the project be designed to minimize manufacturing costs? | 1  2  3  4  N/A |
| Sustainability           | - To what degree over time will the project be useful and viable? | 1  2  3  4  N/A |
Appendix 3.8
Rubrics for evaluating the Program Outcome # 7: the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.

Project topic (An Engineering Solution) being discussed

(The value of fill in the blanks in the above sentence comes from the following Rubrics)

<table>
<thead>
<tr>
<th>Unacceptable (1)</th>
<th>Marginal (2)</th>
<th>Acceptable (3)</th>
<th>Exceptional (4)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very little understanding or discussion on the impact of engineering solutions in a global, economic, environmental, and societal context is provided, or discussion is incorrect</td>
<td>Some discussion on the impact of engineering solutions in a global, economic, environmental, and societal context is provided, but still missing some major points.</td>
<td>A student shows an understanding on the impact of engineering solutions in a global, economic, environmental, and societal context and he/she provides a nearly complete discussion, but misses only some minor points.</td>
<td>A student shows a complete understanding on the impact of engineering solutions in a global, economic, environmental, and societal context and he/she provides an in-depth discussion.</td>
<td></td>
</tr>
</tbody>
</table>

Appendix 3.9
Rubrics for Program Outcome # 8: an understanding of professional and ethical responsibility.

The project topic being considered __________________________

<table>
<thead>
<tr>
<th>Understanding of ethical and professional issues</th>
<th>Unacceptable (1)</th>
<th>Marginal (2)</th>
<th>Acceptable (3)</th>
<th>Exceptional (4)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little or no understanding of professional/ethical issues even where there are serious questions involved</td>
<td>Some consideration of professional, ethical issues related to the project, system, etc.</td>
<td>Good understanding of all the essential issues related to the project, system, etc.; reasonable analysis of the relevant issues</td>
<td>Deep understanding of the professional issues involved and the ethical implications of the project, system, etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 3.10
Rubrics for Program Outcome # 12: recognition of the need for, and an ability to engage in life-long learning.
The project topic being considered __________________________

<table>
<thead>
<tr>
<th>Unacceptable (1)</th>
<th>Marginal (2)</th>
<th>Acceptable (3)</th>
<th>Exceptional (4)</th>
<th>Score or N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognize the need for further education and continuing professional development.</td>
<td>Little or no recognition for the need in continuing education</td>
<td>Moderate recognition for the need in continuing education</td>
<td>Good recognition for the need in continuing education</td>
<td>Deep understanding for the need in continuing education</td>
</tr>
<tr>
<td>Demonstrate an ability to engage in life-long learning</td>
<td>Incapable of doing research on his/her own. No references or knowledge of previous work demonstrated.</td>
<td>Demonstrate some capabilities in doing research on his/her own. Demonstrate some (but inadequate) references or knowledge of previous work.</td>
<td>Capable of doing research on his/her own, i.e. he/she can research major points related to the project. Demonstrate that he/she somewhat familiar with previous work</td>
<td>Very capable of doing research on his/her own, i.e. he/she can do a complete research related to the project. Demonstrate that he/she familiar with previous work</td>
</tr>
</tbody>
</table>
Chapter 4: Innovative projects

Goal: At least two innovative projects must be undertaken and completed by students in each semester for each program and a students’ innovation cell must be established.

4.1. Introduction:
- This mandate enforces that each student should undertake two innovative projects in each semester and a students’ innovation cell should be established in the university.
- The process mentions the steps involved in making the students take two innovative projects over a semester and an evaluation to be carried out at the end of semester.
- The process also specifies the organization and activities of the innovation cell at the university level.

4.2. Approval of Projects:
- The Dean/Head /DC shall inform the students to submit the two innovative projects of the third-year students and two design projects of the first year and second year students, three weeks before the start of each semester.
- Maximum 3 students shall be allowed to form a team for doing projects.
- The format to be used for project approval should be as shown in Appendix 5.1.

4.3. Project Progress review and demonstration:
- The Dean/PC/DC shall evaluate the skill metric of the students in terms of CGPA, other successful projects handled, papers presented, awards received in competition and any other special curricular/co-curricular accomplishments during the study in the school.
- The Dean/PC/DC/Guide shall identify the division of problem into modules as according to the format shown in Appendix 5.2. This problem division shall be done two weeks before the start of the semester.
- The Dean/PC/DC/Guide shall evaluate the teams’ progress two weeks before the start of CAT-1 tests. The format used for evaluation is given in Appendix 5.3.
- The Dean/PC/DC/Guide shall evaluate the teams’ project completion one week after the CAT-2 test using Appendix 5.3 and Appendix 5.4. The Dean/PC/DC shall collect the project report and copy of ppt presentation from students to keep in an archive, as soon as the project evaluation is completed along with filled up details according to the format given in Appendix 5.5.

4.4. Innovation Cell
- An innovation cell shall be established by the experts from the school.
- The organizational structure of innovation cell shall have an Innovation Cell Head and Division Heads similar to the center of excellence using industrial lab set up specified in mandate # 8. The division heads shall be experts from the schools.
● The Dean/PC/DC shall suggest and organize the training programs and workshops conducted by industry and well-established academia for students four weeks before the start of the semester in the innovation cell.

● The Innovation cell shall also provide hardware and software tools not available in the schools to students for doing projects. Additional computers and related equipment as necessary for students shall be procured and kept in the innovation cell by the innovation cell Head complementing what is available in the university elsewhere.

● The completed project reports and demonstrated projects shall be kept in the innovation cell for future developments.

4.5. Checklist

● Innovation Cell Head shall keep the infrastructure details of the Cell.

● Innovation Cell keeps the records of training programs, Workshops or activities performed for students in the Innovation cell in order to train them to do projects.

● Dean/PC/DC shall have the Appendix 5.1, 5.2, 5.3, 5.4 and 5.5 filled up for each innovative project done by students and submitted to Innovation Cell Head for record keeping.

● Innovation Cell Head shall have the project reports submitted by students.
# Appendix 4A

## Project Approval Form

### Name of the Students: [Name]

### Enrollment Numbers: [Roll Numbers]

### Program and Batch: [Program and Batch]

### Year and Semester: [Year and Semester]

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Categories</th>
<th>Items</th>
<th>Marks awarded</th>
<th>Mapped POs and PSOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pre-requisite Courses done by students and relevant courses currently being done</td>
<td>List of courses done 1) 2) 3) Currently doing courses 1) 2)</td>
<td></td>
<td>PO1</td>
</tr>
<tr>
<td>2.</td>
<td>Relevant Literature for the project</td>
<td>Journal/Conference papers 1) 2) 3) Technical Reports (Research/Industrial) 1) 2) 3)</td>
<td></td>
<td>PO2, PSO1</td>
</tr>
<tr>
<td>3.</td>
<td>Internal/Industry Guide’s Expertise</td>
<td>Publications by faculty Journal/Conference papers 1) 2) 3) Technical Reports by faculty 1) 2) 3) Funding projects by faculty 1) 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Resources provided by guide</td>
<td>References: Code for tools:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Limitations of existing systems</td>
<td>Report by students</td>
<td></td>
<td>PO2</td>
</tr>
<tr>
<td>6.</td>
<td>Objectives of the project and problem description</td>
<td>Report by students</td>
<td></td>
<td>PO3</td>
</tr>
<tr>
<td>7.</td>
<td>Number and description of steps involved in solving the problem</td>
<td>Report by students</td>
<td></td>
<td>PO4, PO5</td>
</tr>
<tr>
<td>8.</td>
<td>Components, tools and packages required with justification</td>
<td>Report by student</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. Cost involved in acquiring components and tools, if not available, with justification
   Estimation report by students

10. Number of hours spent by guide with students on category # 5,6,7,8 and 9.
    Total number of hours =

Project Approved? - Is the percentage of marks awarded > 75% and has the project been found realistic, useful and novel?
Yes -- Approved
No - Not Approved

Dean
PC
DC
IQAC
PVC-Academics

Appendix 4B

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Name of Student</th>
<th>Skill Metric of Student</th>
<th>Problem Division/Module</th>
<th>Tools/Design used by student</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dean PC
DC
Guide
IQAC PVC-Academics

Appendix 4C

Project Progress Review and Demonstration

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Categories (for individual students)</th>
<th>Descriptions of Achievement</th>
<th>Marks Awarded</th>
<th>Mapped POs and PSOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Stage of Module Developed</td>
<td>Initial/Middle/Final</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Functions Implemented</td>
<td>1)</td>
<td>PO3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Functionality Tests performed</td>
<td>1)</td>
<td>PO4</td>
<td></td>
</tr>
<tr>
<td>Serial Number</td>
<td>List of objectives achieved</td>
<td>Level of Integration of Modules</td>
<td>Demonstration stage of objectives</td>
<td>Marks awarded based on objectives achievement</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------------</td>
<td>---------------------------------</td>
<td>----------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overall Achievement

- **Dean**: PC
- **DC**: Guide
- **IQAC**
### Appendix 4D

**Project Report Evaluation (based on Project – R6 of Mandate # 7)**

<table>
<thead>
<tr>
<th>SN</th>
<th>Categories</th>
<th>Marks Awarded</th>
<th>Mapped POs and PSOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Quality of project Report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Description of concepts and Knowledge in literature, proposed problems and methods used to find solutions, and results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Conclusion and future scopes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dean  
Academics
PC  
DC  
Guide  
IQAC  
PVC

### Appendix 5E

**Project Outcomes**

<table>
<thead>
<tr>
<th>SN</th>
<th>Categories</th>
<th>Outcomes</th>
<th>Marks Awarded</th>
<th>Mapped POs and PSOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Field Trial of usage of project</td>
<td>Place:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Date:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Paper(s) presented in magazine/Conference/Journal</td>
<td>1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Participation in Competition</td>
<td>1) which project expo and were</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) Comments given by judges</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dean  
Academics
PC  
DC  
Guide  
IQAC  
PVC
5.1. Introduction:
Each school must execute development activity at least one in each type of Product Development, Research Laboratories, Instructional Materials, Working Models, Charts and Monograms in each semester to make this achievement possible, each faculty in the school must carry out at least one development works of any type of development works in each semester.

5.2. Types of development activities:
5.2.1. Product Development
Product development is all about designing and developing a product to cater a service to customers which provides new benefits. It may be enhancement of an existing product through modification or entirely a new product. Such as new home appliances, software modules, other end products.

5.2.2. Research Laboratory
Establish a new research laboratory or enhance the existing laboratory making it research supportive by enhancing the resources. The lab is utilized for research activities.

5.2.3. Instructional Materials
Materials that are used by faculty members in teaching-learning and given to students for further learning to meet certain objectives of topics and bring about the desired outcome of study. The materials must be more exciting, interesting and interactive. They are tools used in instructional activities, which include active learning and assessment in Moodle.

<table>
<thead>
<tr>
<th>Prints</th>
<th>Textbooks, pamphlets, handouts, study guides, manuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio</td>
<td>cassettes, microphone</td>
</tr>
<tr>
<td>Visuals</td>
<td>Charts, real objects, photographs, transparencies</td>
</tr>
<tr>
<td>Audiovisuals</td>
<td>Slides, tapes, films, filmstrips, television, video, multimedia</td>
</tr>
<tr>
<td>Electronic</td>
<td></td>
</tr>
<tr>
<td>Interactive</td>
<td>Computers, graphing calculators, tablets</td>
</tr>
</tbody>
</table>

5.2.4. Working Models
A model of an object is a physical representation that shows what it looks like or how it works. The model is often smaller than the object it represents. A model of a system or process is a theoretical description that can help you understand how the system or process works, or how it might work. Such as a model of big building, model of a
machine, etc. Each faculty member must make at least two working models for each course in each semester.

5.2.5. **Charts:**
A chart is a graphical representation of data, in which "the data is represented by symbols, such as bars in a bar chart, lines in a line chart, or slices in a pie chart. A chart can represent tabular numeric data, functions or some kinds of qualitative structure and provides different info. Faculty members shall also develop charts of the lab processes or the circuit & system used in the laboratory. Each faculty must make at least one chart in each semester.

5.2.6. **Monographs:**
A monograph is a specialist work of writing on a single subject or an aspect of a subject, often by a single author, and usually on a scholarly subject. Monographs are generally published as individual volumes in a short print run. Each faculty must publish at least one Monograph in each academic year.

5.2.7. **Compliance Report**
- Dean of the school must collect the details of development activities at the end of each semester.
- Dean of the school shall submit the compliance report within one week after the last instructional day in each semester to IQAC.
6.1. Self-Study & Research Course - Open Research Problem

6.1.1. Overview
Self-Study & Research course is research driven course open to both UG and PG students. This Course will enable students to devise and execute a work by formulating a research problem under faculty guidance. In this course, students are given a research problem on which they work for one semester and possibly results into Patent or a Publication. The course will enable critical thinking abilities in problem solving. This process may include a literature survey, collection of data (if any), design approach, analysis and conclusion with results. The student will be required to present the body of work in an objective report and demonstration.

6.1.2. Objectives
During the course, the student will learn how to:

- Literature Survey
- Carry out a literature search and write a critical state-of-art review
- Select suitable research methods and integrate them within a research methodology
- Carry out the research processes
- Analyze results critically
- Write-up the body of work as a technical report.

6.1.3. Outcomes
The SSR course provides an opportunity to pursue research in a topic within the broad area of the student's interest. Undertaking the course will enable the student to achieve all or one of the below:

- Review Paper (Scopus/SCI/UGC Care Journal)
- Patent Publication

<table>
<thead>
<tr>
<th>Name of The Course</th>
<th>Self-Study &amp; Research</th>
<th>L</th>
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<td>MTE</td>
<td>ETE</td>
<td>TOT</td>
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<tr>
<td>Ant requisite</td>
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</table>
6.2. **Self-Study & Research**

- Earn credits for research (in ECE, EEE, CSE, IT, CE, ME, Applied Sciences & Medical & Allied Sciences).
- Involves working towards patents and papers.
- Research driven & involving a flexible study plan.
- Become competitive for MS / PhD abroad.
- Excellent opportunities in R&D companies.
- Students who have published good Scientific papers get R&D Jobs, MS and PhD admission with scholarships in Prestigious Universities.
- Opportunity to interact with scientists and Professors involved in research in your area.
- Opportunity to work on Disruptive and cutting-edge technologies.
- Involve in independent research and a flexible study pattern.

**Guidelines for Schools**

- **Course Implementation:**
  - This course will be introduced for 4th and 6th semester in UG course for winter 2020-21 session.
  - For PG students’ courses will be offered in 2nd semester.
  - Course will be of 1 credit
  - Course will be offered to interested students & can be part of major and minor
  - From each batch minimum 15 students from other schools and 30 students from SCSE will be identified and research supervisors shall be allocated by the school research committee based on their area of research.
  - The program which already has research methodology course shall have credit as decided in the course.

- **Approval**—The Self Study & Research should be approved, before the first day of class, by the supervising faculty and the Director of Undergraduate Studies or Certificate Program Director in the relevant department or certificate program. Additional approvals may be required. Please contact the DUS or Certificate Program Director to identify and coordinate all necessary approvals.

- **Faculty appointment**—Self-Study & research must be supervised by a faculty member within the school. An additional mentor outside the GU from renowned research organization is also allowed to mentor the students with one internal faculty if required under the following conditions:
  - a supervising faculty member within the school agrees to be responsible for submitting the final grade and for ensuring that the self-study adheres to academic standards, policies, and procedures pertaining to undergraduate and postgraduate students.
  - Both the instructor and the supervising faculty member are listed as supervisor and co-supervisor on the transcript.

- **Course Content / Quality**—A student should expect to spend at least one semester, including meetings and readings, on the project over the course of the semester for a 1.0 course credit Self Study & Research.
● Meeting schedule and self-study expected from student—
  ♦ 2 hours per week face to face meeting with the supervisor.
  ♦ 4 to 6 hours self-study per week.

● Calendar:

<table>
<thead>
<tr>
<th>SN</th>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4th Jan 2021</td>
<td>List of students both UG &amp; PG</td>
</tr>
<tr>
<td>2</td>
<td>6th Jan 2021</td>
<td>Allocation of Supervisors</td>
</tr>
<tr>
<td>3</td>
<td>18th Jan 2021</td>
<td>Submission of synopsis</td>
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<tr>
<td>4</td>
<td>25th Jan 2021</td>
<td>Approval of Synopsis</td>
</tr>
<tr>
<td>5</td>
<td>5th Feb 2021</td>
<td>1st Review</td>
</tr>
<tr>
<td>6</td>
<td>15th Feb 2021</td>
<td>2nd Review</td>
</tr>
<tr>
<td>7</td>
<td>26th Feb 2021</td>
<td>3rd Review and Draft Paper with plagiarism check (less than 15%)</td>
</tr>
<tr>
<td>8</td>
<td>3rd March 2021</td>
<td>Submission of Paper to Journal/Conference</td>
</tr>
<tr>
<td>9</td>
<td>31st March 2021</td>
<td>Final status of communicated paper</td>
</tr>
<tr>
<td>10</td>
<td>12th April</td>
<td>Final report from all schools and uploading of paper in google drive.</td>
</tr>
</tbody>
</table>

● Grading—The supervisor will evaluate the work, including the final product, associated with the Self Study & Research, and submit a grade by the end of the semester. If the Self Study & Research has an instructor in addition to a supervising faculty member, the instructor will consult on the final grade with the supervising faculty member, and the supervising faculty member will submit the final grade. Students are allowed to appear for final evaluation only if students have published one research paper/patent of the approved research topic.

● Credit toward a major, minor or certificate—the relevant Dean and academic committee of the school will determine whether a Self-Study & Research course successfully completed will count toward the major, minor, or certificate.

6.3. Design Innovation & Thinking” (DIT) Course

Galgotias University - is always striving for shaping a better future for its students by putting astonishing efforts to make its education system excellent enough so students and ultimately whole society would benefit. In the light of above context, GU has taken lead and started the design-oriented learning processes at its entire all departments. GU always tries to cope up with all latest trends in Innovation, Entrepreneurship and Technological advancement. In this regard, GU has introduced a creative and interactive practical approach in its course named “Design Innovation & Thinking” (DIT) in Academic Year 2020-21.
6.3.1. Objective
The main objective of this course is to inculcate interdisciplinary engineering skills in students for taking real time engineering problems available in our society/industry and to come-up with the grass root innovation, can be helpful to all levels of human beings. The objective of using the whole Design Thinking process in every semester and repeating it again and again is to master the process so that irrespective of the problem and domain, after study in their professional career, students would solve the problems easily irrespective of domain as they would have mastered the process. During their Bachelor of Engineering, students are learning the various principles and aspects of engineering, through this Design Engineering course, university wants to inculcate Design Mind-set/Attitude in the students so that students can use their engineering/technical knowledge to create better solutions.

6.3.2. Goal
- Promote the culture of Research in the University.
- Introduce Self Study and Research Course in respective Schools and motivate students to take up the course and faculty to guide the students for SSR Course.
- Ensure that through fortnight meetings, targets for research publications are met as per mandate 40.
- Effective implementation of Engineering Clinic Course by taking responsibility of populating Inter Disciplinary research Project titles in consultation with school faculty and industries.
- Establish best practices in research Publications, funded projects and Consultancy. Identify such proposals in project meetings and ensure completion of objectives.
- Monitoring for effective conversion of PBLs, engineering Clinic, Capstones to Publications in SCOPUS/ WoS/ SCI/ ISI or patents and leveraging good projects to consultancy works for industries.
- Communicate with faculty with diverse backgrounds and experiences to promote mutual learning and populate ideas for interdisciplinary projects for Engineering Clinic, PBLs, etc.
- Ensure MOUs with leading National/International Universities & research labs.
- Ensure that all testing/experimental/ other similar resources are centrally located & maintained for research proposals.
- Motivate students to work in inter-disciplinary domains and publish research papers, books articles and patents.

6.3.3. Implementation Process
Design thinking process is step by step process but iterative in nature. Based on type/nature of projects, it may slightly vary with the sequence. Design Engineering subject at GU is based on below mentioned four modules from 3rd to 6th semester every branch of the engineering curriculum.

a. Engineering clinic courses shall be taken by all students of engineering schools from third semester to sixth semester for 1 credit, with a total of 4 credits in the curriculum from second year to third year and shall be listed under university open core course.

b. Students from multiple disciplines shall be combined together to form a group of 5 to 10 students for their practical study and the design of products, depending on the type of products.
c. Faculty members from each school shall form 2-3 groups of faculties from different schools to guide the student groups. The faculty group shall be multidisciplinary/interdisciplinary. Faculty from school of business and school of medical and allied sciences shall also be in the group.

d. In the third semester, the engineering clinic – I course shall have a structure as shown in Appendix 1.
   - The list of classroom session topics and lab experiments in various schools shall be framed as a syllabus and the corresponding evaluation scheme shall be framed for engineering clinic – I course, for getting approval from core committee.
   - This course shall be considered as an embedded lab course.

e. In the fourth semester, the engineering clinic – II course shall be focused on fundamentals of reverse engineering and competitive assessment.
   - The multidisciplinary student groups shall open the devices, figure out how things work, understand the design, rigorously compare rival designs with respect to functionality, options, user friendliness, etc.
   - The students shall add options and/or improve the design of the devices. The stages of reverse engineering shall be followed as shown in Appendix 2.
   - A separate syllabus shall be developed depending on the type of product to provide the necessary training for students.
   - The evaluation scheme is shown in Appendix 3.

f. In the fifth, and Sixth semesters the engineering clinic – III and IV courses shall focus on nature and scope of the problem, preliminary analyses, number of approaches considered, identifying the selected alternative, and steps taken to complete the design, based on courses taken by students in previous semesters and current semester.
   - Each Dean of the school shall collect design problems for products from reputed Industries.
   - The syllabus format with credit structure with training involved shall be designed by guides and approved by DC, PC, Dean and PVCs.
   - A zeroth first, second and final reviews shall be carried on grading the individual and team.
   - The evaluation scheme is shown in Appendix 4 which shall be based on rubrics for each criterion considered in Appendix 3.
   - Expertise shall be on research publication in SCI/SCOPUS/NIRF accepted.

g. The team shall also write a report on the product design.

h. The courses shall be designed to give practical training or working for the design of actual products as projects, so that at the end of the course, the outcome can be seen in terms of working prototype.

i. Each school shall design minimum 50 multidisciplinary products (25 products over each semester) or problems for product designs to be given over an academic year for each second year, and third year students of engineering. A student can involve himself/herself in two more products as a consult.

j. A faculty instructor from core discipline corresponding to the major part in the product and another faculty from other discipline having minor part in the product, shall be assigned to each group who will guide the students for completion of products.

k. Each faculty shall at least provide three implementable problems of product design with the major part from the school in which he/she comes from and consult other faculty members for minor part from the related disciplines or shall directly collect
design problems with major part related to school and minor part from related disciplines from industries.

1. Each school shall compile the list of products in each class which has major part from that discipline and show the compatibility with courses studied by the students and additional area of exposure required as shown in Appendix 4.

m. Depending on the type of practical training involved the faculty instructor can design either tests/assignments, or reviews through presentation of the work. The evaluation scheme shown in Appendix 3 along with rubrics should be pre-approved by DC, PC, Dean and PVCs. The outcomes of engineering clinic courses shall be recorded by the school with the products produced by students having major part from that school discipline, as shown in Appendix 4.

6.3.4. Requirements for Implementation

- A separate lab for engineering clinics shall be established in each department/school to carry out the experiment/development and all facilities shall be updated by DC/faculty instructor/guides with time.
- The team shall be given access to various engineering clinics of different schools depending on the requirements of the product design.

6.3.5. Pedagogy: Design Sprint, Case studies, Lectures, Discussions, Hands-on group exercises

6.3.6. Outcomes

- The products developed by students as part of engineering clinic courses.
- Students shall compete in an expo to showcase their skills through product competition conducted by GU or other organizations.
- The students who solve problems of industry shall get internship/job from industry.
- Students shall file for patents.

6.3.7. Non-Compliance Action

- Each faculty group of guidance to various batches shall ensure the completion of working prototype of products of each batch of students. Dean shall take non-compliant action against the group of faculties failing to produce working prototype.
- Dean shall be held responsible for not collecting at least 70% of the problems from industry for IV/V semesters engineering clinic products and research papers & patents are filled.
- Dean shall be held responsible for imparting training to students depending on the requirements of students.
6.3.8. **Design Thinking Process – Details with Tools & Techniques**

- Design Thinking: Design Thinking is a process used to create something to solve a problem.
- Empathize mode: The empathize mode is to understand the values of others.
- Define mode: The define mode explicitly expresses the problem that one strives to address.
- Ideate mode: The ideate mode is the mode in which one creates new concepts and ideas.
- Prototype mode: The prototype mode is when one gets the ideas out of one's head and into the world. It is an example object which demonstrates the same features and qualities as the final product.
- Test mode: Test mode is the chance to gather feedback, refine solutions, and continue to learn about one's users.

**Appendix 1**

**Course Details**

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Units</th>
<th>Brief contents</th>
</tr>
</thead>
</table>
| 1         | Product Development       | 1) Introducing students to the science and art of design by evaluating the work of practicing designers  
2) Introducing multidisciplinary teams of engineering students to unifying engineering science principles such as mass, momentum and energy balances; materials; thermodynamics, electricity/ magnetism and electronics using a consumer appliance or an engineering process as a test bed |
| 2         | Intellectual Property     | Enabling students to determine how scientific principles, material properties, manufacturing techniques, cost, safety requirements, environmental considerations and intellectual property rights impact the design of a product, within the context of ethical behavior |
| 3         | Engineering Economics     | Allowing students to participate actively in a meaningful design effort by instrumenting and evaluating the performance of a consumer appliance, product or an engineering process |
| 4         | Engineering Statistics    | Utilization of engineering statistical techniques for analyzing data collected                                                                 |
| 5         | MATLAB/SCILAB             | Using for engineering statistics; entering data, polynomials as vectors, matrices, matrix operations, using functions, printing and plotting graphs, using .m and .mat files |
| 6         | Data Acquisition          | Understanding measurement systems for acquiring data; Transducers, Signal Conditioning, Hardware: Analog |
inputs, analog outputs, Triggers, Digital I/O, real-time system integration bus, software, NI DAQ

<table>
<thead>
<tr>
<th></th>
<th>List of Design Problems</th>
<th>Description of Design methodology using problem solving approach for implementation.</th>
</tr>
</thead>
</table>

Appendix 2

Course Details

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Stages of Reverse Engineering Project</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identify the product for reverse engineering</td>
<td>Devices of current use.</td>
</tr>
<tr>
<td>2</td>
<td>Make a conceptual design</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Identify different subsystems and components</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Compare it with existing designs</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Propose additional options/ change in design</td>
<td>-</td>
</tr>
</tbody>
</table>

Appendix 3

Evaluation Scheme

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Type of review (marks assigned out of 100)</th>
<th>Categories</th>
<th>Marks (out of 100)</th>
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<tr>
<td>1</td>
<td>Zero-th review (10 marks) (2nd Semester)</td>
<td>Type of product and year of manufacturing: industrial/ smart home appliance/ personal gadgets/ entertainment/ agricultural/ biomedical/ automobile/ aeronautical (drones)/ solar/ windmills/ turbines/ software solution, etc.</td>
<td>2</td>
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<tr>
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<td>Type of industry which made and any patents held on the product</td>
<td>2</td>
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<tr>
<td></td>
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<td>Complexity of system in terms of covering concepts from how many disciplines and whether advanced</td>
<td>2</td>
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<tr>
<td></td>
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<td>Number of interfaces between identifiable subsystems and interface standards used.</td>
<td>2</td>
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<tr>
<td></td>
<td></td>
<td>Collection of literature on various subsystems and components and conceptual design of the product</td>
<td>2</td>
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<td></td>
<td>First Review (20 marks) (3rd Semester)</td>
<td>Rigorous comparison with rival designs in terms of complexity, number of interfaces, options, and user friendliness</td>
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<td>3</td>
<td>Second Review (30 marks) (4th Semester)</td>
<td>Additional options and modification in design</td>
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<td>Final Review (40 marks) (5th Semester)</td>
<td>Presentation on final implementation and report</td>
<td>40</td>
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Appendix: 4

4th /5th Semester Review

School of ___________________________

Program Name: ___________________________

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<tr>
<th>Semester:</th>
<th>Section:</th>
<th>Date:</th>
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<table>
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<tr>
<th>Serial No.</th>
<th>Name of Research Group</th>
<th>Guides Name and School</th>
<th>Students’ Group</th>
<th>Research Papers in SCOPUS/SCI</th>
<th>Patents published</th>
<th>Entrepreneurship or start-up</th>
<th>Whether Internship/job received?</th>
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</table>

Signature of Dean
Anti-Plagiarism Policy of Galgotias University

The Galgotias University is based in Greater Noida (NCR New Delhi, India), has an enrolment of over 20,000 students across more than 100 Undergraduate and Post Graduate program, is devoted to excellence in teaching, research and innovation, and to develop leaders who'll make a difference to the world.

Plagiarism, the term defines as "stealing and publication of another author's "language, thoughts, ideas, or expressions" and the representation of them as one's own original work". At Galgotias University several policies and procedures had been defined to carryout for good research. It is very much necessary and mandatory that all those who involved with research activities at university should be aware of university plagiarism guidelines and policies. At University any person who involved with plagiarism will be dealt seriously and referred to the institution disciplinary committee for further necessary action.

Confidential and integrity are the two prime factors that define the trustworthiness among the researchers throughout the globe.

In Galgotias University research group which includes students in undergraduate, students in post graduate, Ph.D. research scholar, faculty (both technical & non-technical) and staff to ensure that their activities are defined by highest integrity, and do not damage the university reputation and fame.

All the Galgotian involved in research, during their admission/appointment shall sign a research declaration which defines the commitment to uphold the highest standard of research integrity.

1. Honesty has to be maintained in all aspects of research.
2. Accountability on all forms of research they carry out
3. Research Publication
   a. Use proper citation and give proper reference.
   b. Similarity index has to be taken priority before any submission of documents (both offline and online)
   c. The communicating/corresponding author must take the concern of other authors before submission elsewhere.
4. Plagiarism Policy
   a. Similarity index of any document between 0 - 10 % is considered as good
   b. Similarity index of any document between 11 - 20 % is considered as moderate.
   c. Similarity index of any document more than 21 % is considered as plagiarized and it is recommended for not submission anywhere.

5. Conflict of interest
   All the Galgotian should make sure that at any point of time there should not arise any conflict of interest on any aspect of research activity.
## 1. Scorecard

<table>
<thead>
<tr>
<th>SN</th>
<th>Particulars</th>
<th>Count/ %</th>
<th>Self</th>
<th>HOD / Dean</th>
<th>VC</th>
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<tbody>
<tr>
<td>1</td>
<td>Students' Feedback</td>
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<tr>
<td>2</td>
<td>Punctuality in updating data (Attendance, Marks/Data) in ERP</td>
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<td>No. of lectures conducted V/s Planned</td>
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<tr>
<td>4</td>
<td>Use of Teaching Techniques, material (Interactive board/ Google classroom/ MOOCs/ Subject offered in NPTEL/ Activity Based Learning for CAT/ ETE)</td>
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<td>5</td>
<td>No. of Substitution in a Semester</td>
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<tr>
<td>6</td>
<td>Mentoring 20 Students and ensuring Zero Grievances pending and concern for their career</td>
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<tr>
<td>7</td>
<td>Patent Filed/ Published/ Granted</td>
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<tr>
<td>8</td>
<td>*Research Paper Accepted in Indexed Journals/ Book/ Book Chapter (Scopus/ WoS) [as per rubrics &amp; cadre]</td>
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<td>9</td>
<td>*Research Paper published in Indexed Journals/ Book/ Book Chapter [as per rubrics &amp; cadre]</td>
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<tr>
<td>10</td>
<td>Joint publication with reputed Industry/ Professor of Premier Institute [amongst point 8 &amp; 9]</td>
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<tr>
<td>11</td>
<td>Guiding Ph.D.</td>
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<tr>
<td>12</td>
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<tr>
<td>13</td>
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<td></td>
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</tbody>
</table>
14. Special Lectures Delivered as Resource Person or Keynote Speaker/ Session Chair outside GU in Conference/ on Advisory/ delivered Guest Lecture/ Reviewing of indexed conference journals, serving in editorial roles, organizing research seminars, conferences /For example: Member on Industry BoG /advisory board / CII/ FICCI/NASSCOM/ Worked as a member on bodies like NBA/ NAAC/ BoS of other college or University/ Ph.D. referee/reviewer/ Examination, any other activity which will make University proud

15. Funded Project Submitted / Grants Obtained (Govt. / Non-Govt.)

16. Professional Society Membership

17. Research Group (Level of Involvement / Participation)

18. Portfolio handled at School/ Centralized with deliverables

19. Activities that support School accreditation

20. Collaborative projects/ MOU with industry, inviting guest speakers from industry, research organizations etc./ Initiate MOU with reputed universities / research centres/ Universities/ bringing Nobel Laurate etc.

21. Initiatives in organizing Co-curricular/ extra-curricular activities/ Entrepreneurial activities

22. Organized FDPs/ Conferences in collaboration with reputed institutes/ industry/ Universities

23. Bringing Companies for Placement

24. Achievements- Awards/ Prizes/ Citations other than self in one year

25. Consultancy Projects

| Total (Out of 100) |

2. R & D Calendar

<table>
<thead>
<tr>
<th>Month</th>
<th>Activity</th>
<th>Responsibility</th>
<th>Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>December, 2021</td>
<td>Workshop on Design Thinking, Critical thinking and Innovation Design</td>
<td>Dean UCRD &amp; IIC</td>
<td>2nd</td>
</tr>
<tr>
<td></td>
<td>Workshop on Entrepreneurship Skill, Attitude and Behavior</td>
<td>Dean UCRD &amp; IIC</td>
<td>2nd</td>
</tr>
<tr>
<td>Event</td>
<td>Organizer/Co-hosts</td>
<td>Date</td>
<td></td>
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<tr>
<td>---------------------------------------------------------------------</td>
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<tr>
<td><strong>January, 2022</strong></td>
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<tr>
<td>Development</td>
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<tr>
<td>Lecture Series on Research Methodology</td>
<td>SOE, SLE, SOAg</td>
<td>3rd</td>
<td></td>
</tr>
<tr>
<td>Workshop on Writing of Research Paper for Students &amp; Faculties</td>
<td>Dean UCRD, Dr. Bala &amp; Dr. Gaurav</td>
<td>3rd</td>
<td></td>
</tr>
<tr>
<td>Workshop on IPR &amp; Patent for Students &amp; Faculties</td>
<td>Dr. Md. Aftab Alam</td>
<td>4th</td>
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<tr>
<td>Workshop on Writing of Research Proposal for funding</td>
<td>Dr. Bala &amp; Dean UCRD</td>
<td>4th</td>
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<tr>
<td>UG, PG Student Project Detail Review of SOH, SOAg, SON and SFC</td>
<td>Honorable VC, Dean UCRD &amp; R&amp;D Team</td>
<td>1st</td>
<td></td>
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<tr>
<td>Review of Research Projects, Seed Fund &amp; Consultancy Project of SOH, SOAg, SON and SFC</td>
<td>Dean UCRD</td>
<td>1st</td>
<td></td>
</tr>
<tr>
<td>Evaluation of Research Group Activities of SOH, SOAg, SON and SFC</td>
<td>Honorable VC &amp; Dean UCRD</td>
<td>1st</td>
<td></td>
</tr>
<tr>
<td>Field/Exposure Visit to Pre-incubation units such as Fab lab, Makerspace, Design Centres, City MSME clusters etc.</td>
<td>Dr. Lokesh Varshaney &amp; IIC</td>
<td>2nd</td>
<td></td>
</tr>
<tr>
<td>Expert talk on &quot;Process of Innovation Development &amp; Technology Readiness Level (TRL)&quot; &amp; &quot;Commercialization of Lab Technologies &amp; Tech-Transfer&quot;</td>
<td>Dean UCRD &amp; IIC</td>
<td>2nd</td>
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<tr>
<td>Lecture Series on Research Methodology</td>
<td>School of Engineering, SOA</td>
<td>3rd</td>
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<tr>
<td>Workshop on Writing of Research Paper for Students &amp; Faculties</td>
<td>Dean UCRD, Dr. Bala &amp; Dr. Gaurav</td>
<td>3rd</td>
<td></td>
</tr>
<tr>
<td>Workshop on IPR &amp; Patent for Students &amp; Faculties</td>
<td>Dr. Md. Aftab Alam</td>
<td>4th</td>
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<tr>
<td>Workshop on Writing of Research Proposal for funding</td>
<td>Dr. Bala &amp; Dean UCRD</td>
<td>4th</td>
<td></td>
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<tr>
<td>UG, PG Student Project Detail Review of SOL, SLE, SOE</td>
<td>Honorable VC, Dean UCRD &amp; R&amp;D Team</td>
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<td>Review of Research Projects, Seed Fund &amp; Consultancy Project of SOL, SLE, SOE</td>
<td>Dean UCRD</td>
<td>1st</td>
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<td>Evaluation of Research Group Activities of SOL, SLE, SOE</td>
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<td>International FDP on Research Methodology Series-5</td>
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<td>Dr. Bala &amp; Dean UCRD</td>
<td>2nd</td>
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<td>Developing Online Repository of Proof of Concepts (PoCs) Developed and Wayforward plan</td>
<td>E-Cell &amp; Startup Cell</td>
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<td>Workshop on Writing of Research Paper for Students &amp; Faculties</td>
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<td>3rd</td>
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<tr>
<td>Workshop on IPR &amp; Patent for Students &amp; Faculties</td>
<td>Dr. Md. Aftab Alam</td>
<td>3rd</td>
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<tr>
<td>International Conference</td>
<td>SFC + SOB</td>
<td>4th</td>
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<tr>
<td>International Conference</td>
<td>School of Engineering + SOA</td>
<td>4th</td>
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<tr>
<td>Session on Achieving Problem-Solution Fit &amp; Product-Market Fit</td>
<td>Dean SoB, Dean UCRD &amp; IIC</td>
<td>4th</td>
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<tr>
<td>UG, PG Student Project Detail Review of SCSE</td>
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<td>Lecture Series on Research Methodology</td>
<td>SOB, SBAS</td>
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<td>Event</td>
<td>Instructor(s)</td>
<td>Date</td>
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<td>----------------------------------------------------------------------</td>
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<tr>
<td>Workshop on Writing of Research Proposal for funding</td>
<td>Dr. Bala &amp; Dean UCRD</td>
<td>April, 2022</td>
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<tr>
<td>Workshop on Writing of Research Paper for Students &amp; Faculties</td>
<td>Dean UCRD, Dr. Bala &amp; Dr. Gaurav</td>
<td>April, 2022</td>
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<tr>
<td>Workshop on Prototype/Process Design and Development - Prototyping</td>
<td>Dr. Lokesh Varshaney &amp; IIC</td>
<td>April, 2022</td>
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<tr>
<td>Session/Workshop on Business Model Canvas (BMC)</td>
<td>Dean SoB, Dean UCRD &amp; IIC</td>
<td>April, 2022</td>
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<tr>
<td>Exposure Visit to Patent Facilitation Centre</td>
<td>Dr. Md. Aftab Alam</td>
<td>April, 2022</td>
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<tr>
<td>International Conference</td>
<td>SOE + SLE</td>
<td>April, 2022</td>
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<tr>
<td>International Conference</td>
<td>SCSE</td>
<td>April, 2022</td>
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<tr>
<td>UG, PG Student Project Detail Review of SMAS</td>
<td>Honorable VC, Dean UCRD &amp; R&amp;D Team</td>
<td>May, 2022</td>
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<tr>
<td>Review of Research Projects, Seed Fund &amp; Consultancy Project of SMAS</td>
<td>Dean UCRD</td>
<td>May, 2022</td>
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<tr>
<td>Evaluation of Research Group Activities of SMAS</td>
<td>Honorable VC &amp; Dean UCRD</td>
<td>May, 2022</td>
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<tr>
<td>Workshop on Writing of Research Proposal for funding</td>
<td>Dr. Bala &amp; Dean UCRD</td>
<td>May, 2022</td>
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</tr>
<tr>
<td>Workshop on Writing of Research Paper for Students &amp; Faculties</td>
<td>Dean UCRD, Dr. Bala &amp; Dr. Gaurav</td>
<td>May, 2022</td>
<td></td>
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<tr>
<td>Workshop on Intellectual Property Rights (IPRs) and IP management for start up</td>
<td>Dr. Md. Aftab Alam &amp; IIC</td>
<td>May, 2022</td>
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<td>Lecture Series on Research Methodology</td>
<td>SMAS, SON</td>
<td>May, 2022</td>
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<tr>
<td>International Conference</td>
<td>SBAS + AOAg</td>
<td>May, 2022</td>
<td></td>
</tr>
<tr>
<td>Demo Day/Exhibition/Poster Presentation of Business Plan/Prototype developed &amp; linkage with Innovation Ambassadors for mentorship support.</td>
<td>E-Cell &amp; Startup Cell + IIC</td>
<td>May, 2022</td>
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<tr>
<td>Session on “How to plan for Start-up and legal &amp; Ethical Steps”</td>
<td>Dr. Lokesh Varshaney + Dean SoB</td>
<td>May, 2022</td>
<td></td>
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<tr>
<td>International Conference</td>
<td>SMAS + SON</td>
<td>May, 2022</td>
<td></td>
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<tr>
<td>UG, PG Student Project Detail Review of SBAS</td>
<td>Honorable VC, Dean UCRD &amp; R&amp;D Team</td>
<td>May, 2022</td>
<td></td>
</tr>
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<td>Review of Research Projects, Seed Fund &amp; Consultancy Project of SBAS</td>
<td>Dean UCRD</td>
<td>May, 2022</td>
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<td>Evaluation of Research Group Activities of SBAS</td>
<td>Honorable VC &amp; Dean UCRD</td>
<td>May, 2022</td>
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### 3. Research Targets

#### 3.1. Semester Wise Faculty Research Target

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<thead>
<tr>
<th>Designation</th>
<th>SCI/Scopus (Out of 3 one Paper Should be in Q1/Q2/Q3 Listed Journals)</th>
<th>Conference/ Book/ Book Chapter / Monograph indexed in WoS/ Scopus</th>
<th>Patent</th>
<th>Consultancy Upto 1 L-10 L</th>
<th>Funded Projects</th>
<th>Seed Fund Proposal</th>
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<tr>
<td>Assistant Professor</td>
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<td>Associate Professor</td>
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<td>3</td>
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<tr>
<td>Professor</td>
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<td>1</td>
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#### 3.2. Yearly Department Target

<table>
<thead>
<tr>
<th>Scopus Indexed Conference</th>
<th>One Week FDP for Research</th>
<th>Research Group Seminars</th>
<th>MoU's</th>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>One- Seminar for every week each Research group</td>
<td>2</td>
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### 3.3. Faculty Wise Target

<table>
<thead>
<tr>
<th>S.N</th>
<th>GU Employee ID</th>
<th>Name of the Full-time teacher</th>
<th>Designation</th>
<th>Department</th>
<th>SCI/Scopus (Out of 3 one Paper Should be in Q1/Q2/Q3 Listed Journals)</th>
<th>Conference/Book/Book Chapter/Monograph indexed in WoS/Scopus</th>
<th>Patent</th>
<th>Consultancy Upto 1 L- 10 L</th>
<th>Funded Projects</th>
<th>Seed Fund Proposal</th>
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</table>

### 3.4. Faculty Research Targets Data

| S N | School | Scopus / SCI Journal Achieved | International Conference Achieved | Funded Projects Achieved | Patents Achieved | OBE/NPTEL/M OOC Certifications Achieved | Scopus / SCI Journal International Conferences Funded Projects Patents OBE/NPTEL/M OOC Certifications |
|-----|--------|-------------------------------|----------------------------------|-------------------------|-----------------|----------------------------------------|---------------------------------------------|-----------------------------|
|     |        |                               |                                  |                         |                 |                                        |                                             |                             |

### 3.5. Upcoming Publication Repository


<table>
<thead>
<tr>
<th>Email Address</th>
<th>Name of Faculty/Research Scholar</th>
<th>GU Employee ID / Admission Number for UG/PG/PhD</th>
<th>Department</th>
<th>Publication Co-authored with Publication Type</th>
<th>Target Indexing of Publication</th>
<th>Publication Stage</th>
<th>Title of Publication</th>
<th>Name of All Co-Authors</th>
<th>Journal/Book/Conference Name (for drafted publication, provide the name of targeted Journal/Book/Conference)</th>
<th>If Accepted Please Provide the Publication Serial Number of University R&amp;D Publication Sheet</th>
<th>Upload the Drafted/Communicated/Accepted Publication Proof in PDF Format</th>
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### 4. Database Creation and Updation

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<tr>
<th>SN</th>
<th>Faculty Database Updation</th>
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<tbody>
<tr>
<td>1.</td>
<td>As a Resource Person (Keynote Speaker, Govt Recognized FDP, Session Chair in International Conference Scopus Indexed)</td>
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<tr>
<td>2.</td>
<td>Consultancy / Research Grants Received/Corporate Training</td>
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<tr>
<td>3.</td>
<td>Publications in Scopus (Free).*</td>
</tr>
<tr>
<td>4.</td>
<td>Publications in SCI (Free).*</td>
</tr>
<tr>
<td>5.</td>
<td>Authored Book with Scopus indexed.*</td>
</tr>
<tr>
<td>6.</td>
<td>Edited Book with Scopus indexed.*</td>
</tr>
<tr>
<td>9.</td>
<td>National Patent (Self Paid).*</td>
</tr>
<tr>
<td>10.</td>
<td>International Patent (Self Paid).*</td>
</tr>
<tr>
<td>11.</td>
<td>Convenor of conference in the University at International level indexed in Scopus</td>
</tr>
<tr>
<td>12.</td>
<td>Citation of papers under the affiliation of Galgotias University</td>
</tr>
<tr>
<td>13.</td>
<td>FDP - Organized as a Moderator</td>
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</table>
5. **Training**
   Research Ethics
   Incentive Policy
   R&D Support

6. **R&D Welcome Instructions, Profile Creation, Data Updation**
   [https://orcid.org/signin](https://orcid.org/signin)
   [https://publons.com/account/login/](https://publons.com/account/login/)
   [https://scholar.google.com/schhp?hl=en&pli=1](https://scholar.google.com/schhp?hl=en&pli=1)
   [https://vidwan.inflibnet.ac.in/login](https://vidwan.inflibnet.ac.in/login)
   [https://www.scopus.com/home.uri](https://www.scopus.com/home.uri)

7. **Research Workshops**
   7.1. **Brochure / Flyer**

---

**INDO-ITALY ONE WEEK INTERNATIONAL VIRTUAL WORKSHOP ON RESEARCH METHODOLOGY- SERIES 04**

*on 6th-10th, September 2021*

Research Methodology is the central and most crucial component, element for carrying out any research endeavour in social sciences. A Researcher has to be well-equipped and must have command over this organ. Otherwise, however, well-defined and finely-crafted the concepts, hypotheses, questions and objectives pertaining to the study may be, at operationalization stage it may not yield desired outcomes and hence, affects final output.

The basic objective of this RMW is to have interaction regarding various dimensions of research and especially its methodology part mainly with the Ph. D. and post-Doctoral scholars of colleges and post-graduate departments of various universities as well as Research Institutes of National and International.

**WORKSHOP CONTENT**

- Artificial intelligence for Cloud and IoT
- Citation And Indexing: The Secret To Academic Research Excellence
- An ethical approach to building trustworthy AI in Research
- Emerging Research areas in Education Technology
- The Academic Research Enterprise: Before and During COVID-19
- The Power of Data to drive economic progress
- Problem based learning and signal processing
- Power Electronic Role in Renewable in Research
- Hybrid methodologies for solving optimization problems
- Writing Research Articles in Curriculum / Syllabus: Why and How
- Using technology to enhance research in teaching and learning
7.2.  Registration Form/ Registration Details

<table>
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<th>Designation</th>
<th>School/ Department</th>
<th>University/College Name</th>
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7.3.  Feedback Form

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<th>Email Address</th>
<th>Full Name</th>
<th>Designation</th>
<th>University/College Name</th>
<th>School/Department</th>
<th>Do you think the webinar would be useful for you?</th>
<th>Give rating for the session</th>
<th>How is the quality of content delivery?</th>
<th>Do you have any additional comments or suggestions about the Session?</th>
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7.4.  Certificate

[Certificate Image]
8. Formats for Data Collection & Analysis

8.1. R & D Publications

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<th>S. N</th>
<th>Timestamp</th>
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<th>Publication Type</th>
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<th>Name of Faculty (Author -1)</th>
<th>Author-1 School / Department / Affiliation</th>
<th>Name of Author -2</th>
<th>Author-2 School / Department / Affiliation</th>
<th>Name of Any other Author / Authors (if any)</th>
<th>Name of School / Affiliation for other Author / Authors (if any)</th>
<th>Title of Paper / Book / Book Chapter / Copyright / Patent</th>
<th>Publicatio n Details</th>
<th>Publication Year</th>
<th>Publication Month</th>
<th>Does it have Co-authors from UG/PG/Ph.D. Scholar/Faculty?</th>
<th>Whether this is a Joint Publication with Outside Organization</th>
<th>Please specify the Type</th>
<th>Name of Industry / Academic Organization</th>
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<th>Impact Factor</th>
<th>Whether indexed in SCI / SCIE (Y/N)</th>
<th>Whether indexed in Web of science (Y/N)</th>
<th>Whether indexed in Scopus (Y/N)</th>
<th>Whether the Journal is Listed in UGC Care Journal List</th>
<th>File Upload (Full Paper / Certificate is any)</th>
<th>Details of UGC Care list mentioning the journal</th>
<th>Plagiarism checked though before publishing</th>
<th>% Plagiarism</th>
<th>Date of Publication</th>
<th>Country of the Co-Author (in case of Joint Publication)</th>
<th>No. of Co-authors</th>
<th>Status of Publication</th>
<th>Name of the Publisher</th>
<th>Web Link to article / paper / abstract of the article</th>
<th>Is it listed in UGC Care list/Scopus/Web of Science other, mention</th>
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https://tinyurl.com/GUPUBLICATIONS
1. R&D PUBLICATIONS

Submit the details of Publications in the form of Journals, Conferences, Patents (applied/published/granted), Books and Book Chapters, copyrights, papers reviewed and various other R&D related activities.
* Required

1. Email address *

2. Publication Type *

Mark only one oval.

☐ IJ
☐ NJ
☐ IC
☐ NC
☐ Book
☐ Copyright
☐ Patent
☐ Other: _______________________________________

3. Whether the Publication is mentioning Galgotias University Affiliation? *

Mark only one oval.

☐ Yes
☐ No
4. Name of Faculty (Author-1) *
   If you cannot find your name please contact on 9561154688 or mail on manoj.shanti@gacotauniversity.edu.in

Mark only one oval.

☐ A Ram Pandey-GU0514411710
☐ Aanchal Vij-GUSCSE201927585
☐ Aarti Neema-GUSECE201927557
☐ Abdul Gani-GUSOME201827129
☐ Abhay Kumar-GUSCSE201827160
☐ Abhilasha Sisodia-GU0911321654
☐ Abhishek Kumar Singh-GUSLLL201927465
☐ Abhishek Kumar Srivastava-GU2112912403
☐ Adwitiya Prakash Tiwari-GU091132174
☐ Adyasa Padhi-GUSOB201927691
☐ Ajaz Ahmad Khan-GUSOB201927657
☐ Ajay Kaushik-GUSCSE201927682
☐ Ajay Kumar-GUSBME201927694
☐ Ajay Shanker Singh-GU1313811531
☐ Ajit Kaushal-GUGSOL201927598
☐ Alka Agnihotri-GUSOB201927493
☐ Alka Sharma-GU0310912479
☐ Alok Tripathi-GU0713411631
☐ Altaf Tariq-GU1314211609
☐ Ambika Pandey-GU04PS11492
☐ Ambreen Fatima Fatima-GUSMAS201927445
☐ Ambrien Ahmed-GU0412812169
☐ Armeed Inem-GUGSOA201927579
☐ Amit Kumar Goel-GU1213812306
☐ Amit Kumar Sharma-GU0815011736
☐ Amit Kumar-GU0213720341
☐ Amit Singh-GUSMAS201827183
☐ Amita Kohli-GU201827244
5. Author-1 School / Affiliation *

*Mark only one oval.*

- [ ] SOAG
- [ ] GS0A
- [ ] SBAS
- [ ] SBBS
- [ ] GS0B
- [ ] SOCE
- [ ] SCSE
- [ ] GSOE
- [ ] SEECE
- [ ] GSFC
- [ ] SOH
- [ ] SOL
- [ ] SLE
- [ ] SOME
- [ ] SMCS
- [ ] SMAS
- [ ] SON
- [ ] GPTC

6. Name of Author-2

If second author is not from the University, then please write the Name of the Author in "Other" at the bottom of this list.

7. Author-2 School / Affiliation

If Author-2 is from outside the Galgotias University, then please mention their affiliation in the "Other" at the bottom of this list.

8. Name of Any other Author / Authors (if any)

You can write multiple names separated by commas.

9. Name of School / Affiliation for other Author / Authors (if any)

Only mention in case of the author is from outside the Galgotias University.
10. **Title of Paper / Book / Book Chapter / Copyright / Patent**

   Only mention Title

11. **Publication Details**

   Name of Journal / Conference / Book / Book Chapter / any .............. (Dates and details) E.g. Soft Computing, Volume 22, Issue 6, pp 1891–1902, March 2018

12. **Status of Publication**

   *Mark only one oval.*

   - [ ] Communicated
   - [ ] Accepted
   - [ ] Published
   - [ ] Indexed
13. Publication Year *

Mark only one oval.

☐ 2021
☐ 2020
☐ 2019
☐ 2018
☐ 2017
☐ 2016
☐ 2015
☐ Other: __________________________

14. Publication Month *

Mark only one oval.

☐ Jan
☐ Feb
☐ Mar
☐ Apr
☐ May
☐ Jun
☐ Jul
☐ Aug
☐ Sep
☐ Oct
☐ Nov
☐ Dec
15. Date of Publication *
   Select from Calendar

Example: January 7, 2019

16. Does it have Co-authors from UG/PG/Ph.D. Scholar/Faculty *
   Selection based on contribution

   Mark only one oval.

   - Faculty
   - Faculty-PhD
   - Faculty-PG
   - Faculty-UG
   - PhD
   - PG
   - UG

17. No. of Co-authors *

   Mark only one oval.

   - 1
   - 2
   - 3
   - 4
   - 5
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22. DOI of Published Articles, Patent Application No. Copyright No.

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23. Journal/ Book Details (ISSN No., ISBN No.)

24. Impact Factor
   For Publications in Journals (only values) else mention as NA

25. Whether indexed in SCI / SCIE (Y/N) *
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## 10. Faculty-Students Awards / Recognition / Resource Person

[Image: Galgotias University Awards & Recognitions](https://tinyurl.com/GUAWARDSREC)

| Timestamp | Email Address | Are you a Student or Faculty | Your Full Name | GU Admission No. | Program Name | Semester | School Name | Salutation | Name of the Faculty | GU Employee ID | Affiliated School | Designation | PAN Number | Category of Activity | In-house / External | Name of Activity / Type of Awards / Recognition | Name of Awarding Agency | Website of the Awarding Agency | Mail ID of contact person from the Awarding Agency | Phone No. of contact person from the Awarding Agency | CIN No. of the Organization or Awarding Agency | Year of Award | Date of Award | Date From (In case of Event Organized) | Date To (In case of Event Organized) | Place of Event | Government / Non-Government | Level | Upload Supporting Documents |
|-----------|----------------|-------------------------------|----------------|------------------|--------------|----------|------------|------------|---------------------|----------------|-------------------|-------------|------------|------------------------|--------------------------|---------------------------------|-------------------|-------------------------------------|---------------------------------|------------------------------------------------|---------------------------------|-------------------------------|-----------------|------------------------|-----------------------------|-----------------------------|----------------------|----------------------|--------|-------------------------------|
2. FACULTY-STUDENTS AWARDS / RECOGNITION / RESOURCE PERSON

Dear Galgotians,

Greetings! Galgotiae University is known for its strong Academic foundation. Any University is known for its awards and honors won by its stakeholders. You are important stakeholder of the University.

I would appreciate if you can spare some time for updating us with your credentials. While updating the details in the database, we expect you to enter the credentials from 2015 onwards (only during the period wherein You were / are part of Galgotias University)

Fill the information about the highly reputed National/ International Awards/ Recognition from Government and Non-Government Agencies and as Resource Person (Session Chair/ Keynote Speaker/ Advisory Board/ Board of industry) / Innovation / Research / Academic Excellence / Research / Entrepreneurship / Others if not covered under any of the above category.

1. The Top 2 faculties and top 2 Students from each school shall be rewarded quarterly
2. Every Achievement shall be on university website & provided with Certificate of Honor
3. Best 20 entries from university shall have Commendation, medal and monetary incentive at a University function annually and shall be placed in GU Prospectus and Newsletters.

AWARDS AND RECOGNITION ENTRY FORM LINK:  https://tinyurl.com/GUAWARDSREC

Last date to fill the form 10-Jan-2021

Please submit proof and details through this form.

The awards/ recognition may include any of the following:
1. Prize/award or recognition received in any competition / Hackathon such as SIH etc. organized by MHRD &
   Co-organized by any of the central agencies
2. Best paper award in any conference or journal
3. Paper presentation
4. Any research grant received by government or non-government agencies
5. Patent being Filed / Published / Under Examination / Granted
6. Copyright being filed
7. Qualified NET / SET / GATE score / Any other Major Exam
8. Got full time admission for PhD in institute of national importance
9. Session chair/ Reviewer in the International Conference/Journal
10. Invited as Keynote speaker/ guest speaker/ expert talk on International or National forum such as conference, FDP, STTP, Training, etc
11. Member of selection committee/ Jury member/ Judge in the competition
12. Member of Advisory Board/ Governing Board of any organization
13. Special recognition by any professional society like ACS / ICS / IEEE, ASME, ASCE, IETE,
IEI, etc
14. NPTEL/ SWAYAM/ Coursera and similar Certification
15. Worked as Auditor for Quality/ Energy/ ISO
16. Evaluator for NBA/NAAC or similar bodies
17. Member of LEC, selection panel of University or any other organization
18. Part of working committee or body of professional society as Chairman or executive member
19. Expert or reviewer or panel member or referee for PhD evaluation
20. Any of the committee of State Government / University/ National Institutes
21. None of the above but you feel it is recognition to be considered can be included
22. Conference / STTP / FDP / Workshop Organized

Please provide and upload the document proof

Note: For each awards you need to do those many individual entries.

* Required

1. Email address *

__________________________________________

2. Are you a Student or Faculty *

Mark only one oval.

☐ Student   Skip to question 3
☐ Faculty   Skip to question 8
☐ Research Scholar   Skip to question 3

Student / Research Scholar Details

3. Your Full Name *

__________________________________________

4. GU Admission No. *

__________________________________________

Page 140 of 236
5. Program Name *

Research Scholars and any other program missing can add in any other

Mark only one oval.

☐ B.Tech in Electrical Engineering
☐ B.Tech in Electrical & Electronics Engineering
☐ B.Tech in Electronics & Communication Engineering
☐ B.Tech in Electronics and Communication Engineering (Bio-Medical Engineering)
☐ B. Tech. in Artificial Intelligence and Data Science
☐ B.Tech in Computer Science and Engineering (Artificial Intelligence and Machine Learning)
☐ B.Tech in Computer Science and Engineering (Internet of Things and Cyber Security Including Block Chain Technology)
☐ B.Tech in Computer Science and Engineering (Gaming Technology)
☐ B.Tech in Computer Science and Business Systems
☐ B.Tech in Computer Science & Engineering (Cloud Computing & Virtualization)
☐ B.Sc (Hons.) Computer Science
☐ BCA
☐ BCA (Hons.) Industry Oriented Program
☐ BCA (Hons.) Multimedia & Animation
☐ B.Tech in Civil Engineering
☐ B.Tech Civil Engineering (Construction Technology)
☐ B.Tech Civil Engineering Environment and Pollution Control
☐ B.Tech in Mechanical Engineering
☐ B.Tech in Automobile Engineering
☐ B.Tech in Biomedical Engineering
☐ B.Sc (Hons.) Biomedical Science
☐ B.Sc (Hons.) Biological Science
☐ B.Sc Healthcare & Clinical Research
☐ B.Sc. Nutrition & Dietetics
☐ B.Sc. Medical Biotechnology
☐ Bachelor of Architecture (B.Arch)
☐ B.Sc. Fashion Design (In association with T-Series)
Bachelor of Business Administration (BBA)
BBA (Business Analytics)
BBA in Logistics and Supply Chain Management
BBA in Aviation Management
B.Com (Hons.)
B.Com (Hons) International Accounting & Finance
B.Com (Hons.) Financial Markets
BBA Financial Investment Analysis
B.A (Hons.) in Applied Psychology
B.A (Hons.) in Economics
B.A (Hons.) in English
B.A (Hons.) in Political Science
B.A (Hons.) in Sociology
B.Sc (Hons.) Chemistry
B.Sc Environmental Science
B.Sc (Hons) Mathematics
B.Sc (Hons.) Physics
B.Sc. (Hons.) Forensic Science
B.Sc (Hons) Microbiology
B.Sc (Hons) Zoology
B.Sc (Hons) Botany
B.Sc (Hons) Bio-Chemistry
B.Sc.(General) Mathematics & Data Science
B.Sc. (General) PCM
B.Sc. (General) ZBC
Bachelor of Pharmacy (Approved by Pharmacy Council of India)
B.Sc in (Medical Lab Technology)
B.Optometry
B.Sc in Cardiovascular Technology
Bachelor in Health Information Administration
B.Sc. Medical Imaging Technology
B.Sc in Nursing
B.Sc. Hotel Management
Bachelor of Hotel Management
Bachelor of Tourism Administration
B.A Journalism and Mass Communication
B.Ed (2 year) Full time
B.Sc (Hons.) Agriculture
Five year Integrated B.A. LL.B (Hons.)
Five year Integrated B.B.A. LL.B (Hons.)
Bachelor of Laws (LL.B.)(Hons.)
M.Sc Computer Science
MCA
M.Tech in Computer Science & Engineering
M.Tech Computer Science & Engineering (Artificial Intelligence & Machine Learning)
M.Tech in Data Science
M.Tech in Communication Engineering
M.Tech in VLSI Design
M.Tech in Power System Engineering
M.Tech in Energy & Environmental Engineering
M.Tech in Structural Engineering
M.Tech in Transportation Engineering
M.Tech in CAD/CAM
M.Tech in Automobile Engineering
M.Tech in Mechatronics
M.Sc in Clinical Research
M.Sc in Biomedical Science
M.Sc in Biological Science
M.Sc. Nutrition & Dietetics
M.Sc. Medical Biotechnology
M.Sc. Fashion Design (In Association with T-Series)
MBA
MBA in Logistics & Supply Chain Management
MBA in Aviation Management
☐ M.Com
☐ MBA in Financial Management
☐ M.A in Economics
☐ M.A in English
☐ M.A in Sociology
☐ M.A in Political Science
☐ M.A in Applied Psychology
☐ M.Sc in Environmental Science
☐ M.Sc in Mathematics
☐ M.Sc in Bio-Chemistry
☐ M.Sc in Physics
☐ M.Sc in Forensic Sciences
☐ M.Sc in Chemistry
☐ M.Sc in Microbiology
☐ Master of Laws (LL.M)
☐ Master of Pharmacy (Pharmaceutics)
☐ Master of Physiotherapy (M.P.T.)
☐ M.Sc. Medical Lab Technology
☐ Masters in Optometry
☐ M.Sc. Cardio Vascular Technology
☐ Master of Tourism Management
☐ M.A Journalism and Mass Communication
☐ M.Ed
☐ M.A in Education
☐ M.Sc Agriculture (Agronomy)
☐ Other: __________________________
6. Semester *

Mark only one oval.

☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ 10
7. School Name *

*Mark only one oval.*

- [ ] School of Computing Science & Engineering (SCSE)
- [ ] School of Electrical, Electronics & Communication Engineering (SEECE)
- [ ] School of Civil Engineering (SOCE)
- [ ] School of Mechanical Engineering (SOME)
- [ ] School of Biosciences and Biomedical Engineering (SBBS)
- [ ] School of Architecture & Design (SOA)
- [ ] School of Business (SOB)
- [ ] School of Finance & Commerce (SFC)
- [ ] School of Liberal Education (SLE)
- [ ] School of Basic & Applied Sciences (SBAS)
- [ ] School of Medical & Allied Sciences (SMAS)
- [ ] School of Nursing (SON)
- [ ] School of Hospitality & Tourism (SOH)
- [ ] School of Media & Communication Studies (SMCS)
- [ ] School of Education (SOE)
- [ ] School of Agriculture (SOAG)
- [ ] School of Law (SOL)
- [ ] University Polytechnic (GPTC)

Faculty Details

8. Salutation *

*Mark only one oval.*

- [ ] Dr.
- [ ] Mr.
- [ ] Mrs.
- [ ] Ms.
9. Name of the Faculty *
   Write the Name as per Records (do not write salutation)

10. GU Employee ID *

11. Affiliated School *

   Mark only one oval.
   - SOAG
   - GSOA
   - SBAS
   - SBBS
   - GSOB
   - SOCE
   - SCSE
   - GSOE
   - SEECE
   - GSFC
   - SOH
   - SOL
   - SLE
   - SOME
   - SMCS
   - SMAS
   - SON
   - GPTC
12. Designation *

*Mark only one oval.*

- Professor
- Associate Professor
- Assistant Professor
- Other: ____________________________

13. PAN Number *

---

Skip to question 14

Awards & Recognition & resource Person

The Faculty as resource person and other awards and Recognition / Major Events organized to be entered in this section

---

14. Category of Activity *

*Mark only one oval.*

- Academic (NPTEL / Best Teacher / Best Student / Any Other)
- Extension (NSS / NCC / NGO / Social Service / CSR / Any Other)
- Innovation Activity (Hackathons / Project Competition)
- Research Activity (Best Paper / Resource person in Journals and Conferences / Any Other)
- Other: ____________________________

15. In-house / External *

*Mark only one oval.*

- External
- In-house
16. **Name of Activity / Type of Awards / Recognition** *

Any activity not listed here to be added as Any Other and Mention the details of the Activity

*Mark only one oval.*

- Winner of Competitions/Hackathon
- Keynote Speaker/ Expert Talk/on International or National forum
- Reviewer of Journal / Conference
- Session Chair / Track Chair
- Guest lecture Delivered
- Patents being Filed / Published / Under Examination / Granted
- Evaluator/Examiner/Auditor
- Research Grants Received
- Best Paper Award
- Copyright
- Qualified NET / SET / GATE score / Any other Major Exam
- Member of Selection Committee/ Jury member/ Judge
- Member of Advisory Board/ Governing Board/ BoS
- Special Recognition by any Professional society
- Member of LEC, selection panel of University or any other organization
- NPTEL/ SWAYAM/ Coursera and similar Certification
- Expert or reviewer or panel member or referee for PhD evaluation
- Award Recognition against Extension Activity (NSS, Blood Donation etc.)
- Conference Organized
- FDP Organized
- STTP Organized
- MoU / Collaborations Done
- Other: ______________________________
17. **Name of Award / Recognition / Fellowship / Event / Activity** *

Describe the details of the Award or the Event

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

18. **Name of Awarding Agency** *

_________________________________________________________________

19. **Website of the Awarding Agency**

_________________________________________________________________

20. **Mail ID of contact person from the Awarding Agency**

_________________________________________________________________

21. **Phone No. of contact person from the Awarding Agency**

_________________________________________________________________

22. **CIN No. of the Organization or Awarding Agency**

You can find the CIN on following websites [https://www.zaubacorp.com/](https://www.zaubacorp.com/) or [https://www.tofler.in/](https://www.tofler.in/) or [http://www.mea.gov.in/meafportal/findCIN.do](http://www.mea.gov.in/meafportal/findCIN.do)
23. Year of Award *

Mark only one oval.

☐ 2015
☐ 2016
☐ 2017
☐ 2018
☐ 2019
☐ 2020
☐ 2021
☐ Other: ____________________________

24. Date of Award *

Example: January 7, 2019

25. Date From (In case of Event Organized)

Example: January 7, 2019

26. Date To (In case of Event Organized)

Example: January 7, 2019

27. Place of Event *

___________________________________
28. Government / Non-Government *

*Mark only one oval.*

☐ Government

☐ Non-Government

29. Level *

*Mark only one oval.*

☐ International

☐ National

☐ State

☐ University

30. Upload Supporting Documents *

If multiple supporting files for single award then combine it to single pdf and upload

Files submitted:

---

10.1 GU faculty as Resource Person

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of School</th>
<th>Faculty Name</th>
<th>Type of Activity</th>
<th>Activity for which as a recourse person (Workshop, STTP, Conference)</th>
<th>Venue</th>
<th>Date From</th>
<th>Date To</th>
<th>Year</th>
</tr>
</thead>
</table>
11. Publication Funding Applications

Form Link:

<table>
<thead>
<tr>
<th>Email Address</th>
<th>Year</th>
<th>Publication Type</th>
<th>GU Faculty ID / GU Student Admission No.</th>
<th>Name of Faculty / Name of Student</th>
<th>Co-Author / Team Name</th>
<th>School Name</th>
<th>Name of Conf. / Journal / Seminar / Project / Workshop</th>
<th>Title of Research Paper / Project</th>
<th>Event Start Date</th>
<th>Event End Date</th>
<th>Venue of Event</th>
<th>Plagiarism %</th>
<th>Registration Amount</th>
<th>TA/DA</th>
<th>Project Cost</th>
<th>Remarks if any</th>
<th>File Upload (Supporting documents)</th>
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12. MoU Details

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of Company</th>
<th>Start Date</th>
<th>End Date</th>
<th>Year</th>
<th>Nature/ brief Detail about MOU</th>
<th>Name of School for which MOU is applicable/ Whole University</th>
<th>Department</th>
<th>Active / Inactive Status</th>
<th>National / International</th>
</tr>
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</table>

13. International Research Collaboration

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of University</th>
<th>Country</th>
<th>Potential Collaborating Departments</th>
<th>Person in contact</th>
<th>Brief Summary</th>
<th>ATR</th>
<th>Remarks</th>
</tr>
</thead>
</table>

14. Events Organized @ GU

<table>
<thead>
<tr>
<th>Timestamp</th>
<th>Email Address</th>
<th>Name of the Event</th>
<th>Name of School / Cell organizing the Event</th>
<th>Name of the Department</th>
<th>Division</th>
<th>Date of Event</th>
<th>End Date of Event</th>
<th>Time</th>
<th>Nature of Event</th>
<th>Description of the Event</th>
<th>Event In-charge</th>
<th>Level of Event</th>
<th>In Collaboration with</th>
<th>Upload Proposal / Flyer / Creative document if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>---------------------</td>
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<td></td>
</tr>
<tr>
<td>Expenditure Incurred (Yes/No)</td>
<td>Honorarium Amount (in Rupees) if any</td>
<td>Course Mapped (Name of the Course)</td>
<td>Course Code</td>
<td>Semester</td>
<td>CO Mapped</td>
<td>Event is Mapped with which Criteria of NAAC / NBA (Mention the sub-criteria number)</td>
<td>Report Submitted (Yes / No)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Consultancy Data

15.1. Consultancy Master

<table>
<thead>
<tr>
<th>SN</th>
<th>Financial Year</th>
<th>Bill No.</th>
<th>Date</th>
<th>Name Client Organization</th>
<th>Description of Assignment</th>
<th>School Name</th>
<th>Name of faculty (Chief Consultant)</th>
<th>Amount (Rs.)</th>
<th>CGST</th>
<th>SGST</th>
<th>IGST</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Amount (Rs.)</td>
<td></td>
<td></td>
<td></td>
<td>Amount received (in words)</td>
</tr>
</tbody>
</table>

15.2. Consultancy Summary

<table>
<thead>
<tr>
<th>School Name</th>
<th>2018-19</th>
<th>2019-20</th>
<th>2020-21</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Amount (Rs.)</td>
<td>No.</td>
</tr>
</tbody>
</table>

16. Seed Money

16.1. Pre-Review Report of Seed Funding Research Proposals

<table>
<thead>
<tr>
<th>S N</th>
<th>Name of Faculty</th>
<th>Date</th>
<th>School Name</th>
<th>Title of Proposal</th>
<th>Duratio n</th>
<th>Total Score</th>
<th>Review Committee Members Name</th>
<th>Advisory Committee Comments</th>
<th>Proposed Amount</th>
</tr>
</thead>
</table>

16.2. Review Report of Seed Funding Research Proposals

| S N | Name of Faculty | Date | School Name | Title of Proposal | Duratio n | Collaboration with Industry/Govt. | Project Outcome (Social/Community/research/UG/PG/Ph.D/Emerging trends) | Review comments of the | whether approve | Total Amount | Total Amount |
|-----|----------------|------|-------------|-------------------|-----------|-------------------------------|-------------------------------------------------|--------------------------|----------------|-------------|-------------|-------------|

Page 154 of 236
### 16.3. Seed Fund Project Review

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of the Faculty</th>
<th>Designation</th>
<th>Name of the Project</th>
<th>Significance of the research (10)</th>
<th>Originality (40)</th>
<th>Quality of scientific content (10)</th>
<th>Publications/projects/patent s related to the proposed work (10)</th>
<th>Design and Methodology (10)</th>
<th>Plagiarism Report (5)</th>
<th>Feasibility of the Proposal (10)</th>
<th>Benefits for Organization (5)</th>
<th>Total Score</th>
<th>Category (1/2/3/4)</th>
</tr>
</thead>
</table>

### 16.4. Seed Money Summary

<table>
<thead>
<tr>
<th>SN</th>
<th>School</th>
<th>Name of Principal Investigator</th>
<th>Name of Co-Investigator</th>
<th>Title of the project</th>
<th>Reference No.</th>
<th>Date of Approval</th>
<th>Year of receiving</th>
<th>Duration of the grant (in months)</th>
<th>1st Instalment (in Lakhs)</th>
<th>2nd Instalment (in Lakhs)</th>
<th>3rd Instalment (in Lakhs)</th>
<th>Total amount of seed money (in Lakhs)</th>
</tr>
</thead>
</table>

### 17. Faculty Research Citation

| GU ID | Department | Faculty Name | No. of Paper in Web of Science/SCI | Citations in WoS/SCI | No. of Papers in Scopus | Citations in Scopus | No. of Papers in Google Scholar | Citations in Google Scholar | Google Scholar h-Index | Google Scholar i10-index | Vidwan_Inflibnet Link | Google Scholar Link | Publons Link | ORCID ID | Scopus ID | Researchgate Link | Academia.edu | Total No. of Papers with GU Affiliation | Total No. of Papers with Other than GU Affiliation | All Profile made public Y/N | PhD Completed / Pursuing | No. of PhD Scholars guiding in GU | No. of PhD Scholars guiding Outside GU | No. of PhD Scholars awarded under Supervision | No. of Patents Published/Granted Filed with GU Affiliation |
|-------|------------|--------------|-------------------------------|-----------------|------------------------|---------------------|-------------------------------|-----------------------------|-------------------------|-------------------------|-----------------------|----------------------|-----------------|---------|--------|----------------|----------------|-----------------------------|-----------------------------|----------------|----------------|----------------|----------------|-----------------|----------------|-----------------|

### 18. Faculty Research & Innovation Awards

| SN | Name | GUI D | Designation | School | Total No. of Scopus conference papers published | Total No. of Scopus Journal papers published | Total No. of SCI papers with/without impact factors | Total cumulative impact factor | Patent published/Granted | Book Chapters Scopus/Non-Scopus | Authored Books | Edited Books | Funded projects | Total Amount |
|----|------|-------|-------------|--------|-----------------------------------------------|-----------------------------------------------|-------------------------------|--------------------------|------------------|----------------|---------------|---------------|-----------------|----------------|----------------|

Page 155 of 236
19. Research Groups

<table>
<thead>
<tr>
<th>S No</th>
<th>Faculty Name</th>
<th>Designation</th>
<th>Research Group</th>
<th>Sub Domain</th>
<th>Group In-Charge</th>
<th>Email</th>
<th>Contact No</th>
</tr>
</thead>
</table>

20. Student Project and Review Formats

20.1. Student Project and Review Details

<table>
<thead>
<tr>
<th>Project Group No.</th>
<th>Student Enrollment Number</th>
<th>Student Admission Number</th>
<th>Student Name</th>
<th>Program Branch/Section</th>
<th>Semester</th>
<th>Student Email-ID</th>
<th>Student Mobile Number</th>
<th>Category</th>
<th>Group Count</th>
<th>Guide Name</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Guide Email Id</th>
<th>Guide Mobile Number</th>
<th>Title of the Project</th>
<th>Approval Form</th>
<th>Abstract Status</th>
<th>Area/Domain</th>
<th>Outcomes Conference Paper/ Journal/Patent/Product</th>
<th>Whether attended the paper writing /Research workshop by Dr. Balamurugan/ Dr. Meenakshi</th>
<th>Review 1 Date</th>
<th>Review 1 Comments (Minimum three)</th>
<th>Research Paper Status % of Paper Written</th>
<th>Marks out of 20 (In Binary)</th>
<th>Action taken on Review 1</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Review 2 Date</th>
<th>Review 2 Comments (Minimum three)</th>
<th>Research Paper Status % of Paper Written</th>
<th>Marks out of 20</th>
<th>Action taken on Review 2</th>
<th>Review 3 Date</th>
<th>Review 3 Comments (Minimum three)</th>
<th>Research Paper Status % of Paper Written</th>
<th>Marks out of 20</th>
<th>(R1+R2+R) Final Status</th>
<th>Final Review Status</th>
<th>Total Marks (R1+R2+R)</th>
</tr>
</thead>
</table>

20.2. Student Project and Review Summary

<table>
<thead>
<tr>
<th>S No</th>
<th>School</th>
<th>Project Details Filled Status</th>
<th>UCRD Review Date</th>
<th>Journal Target</th>
<th>Conference Target</th>
<th>Patent Target</th>
<th>Product Target</th>
<th>Other Target</th>
<th>Total</th>
</tr>
</thead>
</table>

21. Ph.D Programmes Data Formats

21.1. Ph.D Supervisor Details

<table>
<thead>
<tr>
<th>S No</th>
<th>Name of Faculty</th>
<th>Highest Qualification</th>
<th>Designation</th>
<th>Research Area</th>
<th>Ph.D. students allotted outside of GU</th>
<th>Ph.D. students allotted in GU</th>
<th>Quota available</th>
<th>Vacancy</th>
</tr>
</thead>
</table>
### 21.2. Ph.D School wise Information Sheet

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of PhD Scholar</th>
<th>Reg. no</th>
<th>Year and month of Enrolment</th>
<th>Mb. No. of PhD Scholar</th>
<th>Whether full time or part time</th>
<th>Affiliation of part time scholar</th>
<th>Name of Internal Supervisor</th>
<th>Name of External Supervisor</th>
<th>Affiliation of External Supervisor</th>
<th>Ph. No of Internal Supervisor</th>
<th>Ph. No of External Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

#### Name of courses completed/pursuing

<table>
<thead>
<tr>
<th>Status of course work</th>
<th>Name of External Expert for DC</th>
<th>Affiliation and Email, mb no of expert</th>
<th>DC conducted I/II/III</th>
<th>Fees paid/dues if any</th>
<th>No of seminars presented (Progress report)</th>
<th>No of publications in journals with DOI, name of Journal and publisher</th>
<th>Thesis submitted or not</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
</tr>
</tbody>
</table>

#### 22. 3.4.5 NAAC

<table>
<thead>
<tr>
<th>Title of paper</th>
<th>Name of the author/s</th>
<th>Department of the teacher</th>
<th>Name of Journal</th>
<th>Year of publication</th>
<th>Link to the recognition in UGC enlistment of the Journal</th>
<th>Link to website of the Journal</th>
<th>Link to article/ paper / abstract of the article</th>
<th>Is it listed in UGC Care list/Scopus/Web of Science /other, mention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

#### 23. 3.4.6 NAAC

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the teacher</th>
<th>Title of the book/chapters published</th>
<th>Title of the paper</th>
<th>Title of the proceedings of the conference</th>
<th>Year of publication</th>
<th>ISBN / ISSN number of the proceeding</th>
<th>Whether at the time of publication affiliating institutions was same (Yes/No)</th>
<th>Name of the publisher</th>
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</thead>
<tbody>
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</tbody>
</table>

#### 24. 3.6.3 and 3.6.4 NAAC

<table>
<thead>
<tr>
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<th>Organising unit/ agency/ collaborating agency</th>
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Consultancy Formats

Consultancy Formats Index

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<td>School Wise summary for Consultancy</td>
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<td>Minutes of meeting</td>
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<td>Letter to industry</td>
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<td>7.</td>
<td>Problem statement</td>
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<td>8.</td>
<td>Sample Consultancy Report</td>
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26.2. School Wise summary for Consultancy

Revenue generated from consultancy during the last five years (INR In Lakhs)

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Annexure-I

26.3. Consultancy Request Letter
Ref. No: GU/SBAS/RAI/01/16-17

The Principal Scientist
Integral Biosciences Private Ltd.
Noida

Subject: Industry- Institute Interaction and Identification of Areas of Industrial Consultancy

Dear Sir,

I am writing this letter on the behalf of Galgotias University, Greater Noida, UP, has been established through The Galgotias University Act, 2011 passed by State Legislative assembly, listed with UGC under section 2(f) of UGC Act, 1956. The University has been conceived as a temple of learning for intellectual, cultural, aesthetic and skill development of the brilliant youth of the country. GU offers Under Graduate and Post Graduate courses, in an ideal Academic environment, conducive to Research, development and Industry integration. This unique mix of cultures and backgrounds helps our students learn the finer aspects of life, above the regular academics. We know that Integral Biosciences Private Limited is a leading name in facilitating India is a drug discovery services company based out of India.

IBS also offer end-to-end integrated drug discovery services to innovation focused biotech start-ups and small to mid-sized pharmaceutical companies. IBS is a well renowned Contract Research Organization (CRO) in India providing preclinical development solution. Our office of Research & Industrial Consultancy at Galgotias University intends to work in collaboration in Providing with your company on innovative research solution to known problems.

Could you please spare some time from your schedule to discuss the cited matter with the undersigned at your earliest convenience.

With regards

Dean
SBAS
Minutes of Meeting
Sub: Meeting Regarding Industrial Consultancy

Place: [Place]
Date of Meeting: [Date]

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The following discussions were held:

- **Point 1**
- **Point 2**
- **Point 3**
- **Point 4**
26.5. MOU

MEMORANDUM OF UNDERSTANDING

This Deed of Memorandum of Understanding is entered on 20 April 2020 to collaborate for consultancy project between the Firm Tricolor India Schauspiel Private Limited, with its principal address at M-101, Shatabdi Rail Vihar, Sector-62 Noida, Uttar Pradesh, 201301, represented by Himanshu Singh Sabharwal hereinafter called “First Party”, which expression shall, unless repugnant to the context and meaning thereof, be deemed to mean and include its successors, executors, administrators, representatives and permitted assignees)

AND

Galgotias University, Greater Noida, represented by the Dean School of Architecture & Design (Herein after referred to as the “Second Party” which expression shall include its successors and assigns)

Now, this Deed of Memorandum of Understanding witnessed as follows:

1. The firm Tricolor India Schauspiel Private Limited, will provide the students a platform and opportunity to learn on the latest trends of research with an industry endorsed certification program cum elective course under their curriculum in association with Galgotias University, a renowned institution with rich experience in educating & serving the student fraternity and holds the experience of promoting many budding talents with various innovative programs.

2. This industry endorsed certification & value addition cum elective course shall be implemented in Galgotias University, Greater Noida.

3. The firm Tricolor India Schauspiel Private Limited will provide training and placement program and for the students of Galgotias University

4. This program shall be jointly certified by the firm Tricolor India Schauspiel Private Limited and Galgotias University.

5. This Agreement shall be made for a period of one years from the date of execution of Agreement within which the activities mentioned in the Agreement are to be carried out. The parties may, after mutual consultation, extend the period of the Agreement as deemed necessary.

7. Either of the parties may terminate the agreement by giving three months’ notice of termination in writing to the other party.

IN WITNESS WHEREOF, the parties hereto have set and subscribed their respective hands and seals on this Signed for and on behalf of the firm Tricolor India Schauspiel Private Limited

<table>
<thead>
<tr>
<th>Signed for and on behalf of the Galgotias University.</th>
<th>Signed for and on behalf of the Tricolor India Schauspiel Private Limited.</th>
</tr>
</thead>
</table>

PLACE: Greater Noida, India

DATE: 20th April 2021
Dr.
Address of the company

Subject: Industrial Consultancy to ____________________________

Dear Sir,

We are greatly thankful to you, for sharing your industrial problem with us. We assure you that our office of Research & Industrial Consultancy, Galgotias University will provide you feasible and acceptable solution.

As per our discussion with you, GU will charge the following consultancy fee:

Consultancy Charges:

With regards

Dean
26.7. Problem Statement

On Company Letter Head (4)

Ref. No: Date:

Dear

This is in continuation of our communication regarding working jointly in the industry since we are dealing with products and customers. Integral Biosciences Pvt. Ltd (IBS) is a drug discovery incubator, which offers end-to-end integrated drug discovery services to innovation focused biotech start-ups and small to mid-sized pharmaceutical companies. IBS is a well renowned Contract Research Organization (CRO) in India providing preclinical development solution.

Following assistance is required from your side:

- Standardization of protocol for assessing DNA damage (apoptosis) by annexin V staining.

Regards,
Consultancy Sample Report

Submitted on

Company Name

Title of the Project

Submitted By

Date
Standardization of assay protocol for apoptosis by annexin-V binding

The entitled project “Title of the Project” has been developed for ………… Pvt Ltd. to assess the DNA damage in cancer pathogenesis. IBS offers end-to-end integrated drug discovery services to innovation focused biotech start-ups and small to mid-sized pharmaceutical companies. IBS is a well renowned Contract Research Organization (CRO) in India providing preclinical development solution.

**Issues to develop a standardized assay protocol for apoptosis**

1. To determine the DNA damage at an early stage.
2. To standardize the assay protocol for easy and precise apoptosis assessment.

The following steps are used in this project:

**Flow Diagram**

![Flow Diagram]

**Statement of Problem:**

Most of apoptosis detection method determines the apoptosis at a later stage. The late detection of apoptosis prevents the treatment of cell damage in cancer patients. To overcome this problem, a method to detect apoptosis immediately after its initiation is utmost important. Annexin V-FITC Apoptosis Detection is based on the observation that soon after initiating apoptosis, cells translocate the membrane phosphatidylserine (PS) from the inner face of the plasma membrane to the cell surface. Once on the cell surface, PS can be easily detected by staining with a fluorescent conjugate of Annexin V, a protein that has a high affinity for PS.

**Materials and Chemicals Required:**

- Annexin V-FITC
- 1X Binding Buffer
- Propidium Iodide (PI)
- Microcentrifuge
- Pipettes and pipette tips
- Fluorescent Microscope
- Glass slides
- Orbital shaker

**Consultancy report**

**Identification of problem**

Apoptosis is an ordered and orchestrated cellular process that occurs in physiological and pathological conditions. It is also one of the most studied topics among cell biologists. An understanding of the underlying mechanism of apoptosis is important as it plays a pivotal role in the pathogenesis of many diseases. In some, the problem is due to too much apoptosis, such as in the case of degenerative diseases while in others, too little apoptosis is the culprit. Cancer is one of the scenarios where too little apoptosis occurs, resulting in malignant cells that will not die. The mechanism of apoptosis is complex and involves many pathways. Defects can occur at any point along these pathways, leading to malignant transformation of the affected cells, tumour metastasis and resistance to anticancer drugs. Despite being the cause of problem, apoptosis plays an important role in the treatment of cancer as it is a popular
target of many treatment strategies. The abundance of literature suggests that targeting apoptosis in cancer is feasible. However, many troubling questions arise with the detection of apoptosis

**Expected Solution**

The early detection of apoptosis can be done by

1. Annexin-V-FITC staining assay
2. Early identification of apoptotic cells by fluorescence microscopy.

**Detection of DNA damage apoptosis by Annexin-V-FITC staining assay**

Annexin V-FITC Apoptosis Detection is based on the observation that soon after initiating apoptosis, cells translocate the membrane phosphatidylserine (PS) from the inner face of the plasma membrane to the cell surface. Once on the cell surface, PS can be easily detected by staining with a fluorescent conjugate of Annexin V, a protein that has a high affinity for PS.

The standardised assay protocol is as follows:

1. Incubation of cells with Annexin V-FITC
   a. Induction apoptosis by desired method.
   b. Collection of 1-5 x 10⁶ cells by centrifugation.
   c. Re-suspension of cells in 500 μl of 1X Binding Buffer.
   d. Addition of 5 μl of Annexin V-FITC and 5 μl of propidium iodide.
   e. Incubation at room temperature for 5 min in the dark.
2. Detection by Fluorescence Microscopy
   a. Place the cell suspension on a glass slide. Cover the cells with a glass coverslip.
   b. Observe the cells under a fluorescence microscope using a dual filter set for FITC & Texas Red.

Dated:
To
The Dean,
UCRD
Galgotias University
Greater Noida

Subject: - Consultancy to be provided to.........................

Respected Sir

School of Basic Applied Science has successfully completed the consultancy project titled “Standardization of assay protocol for apoptosis by annexin-V binding” for Integral Biosciences Private Ltd. The payment of Rs. _____________ as consultancy charges has been received via Cash/NEFT and the same is being submitted to your office.

This is for your information please.

With regards,

Dean
26.10. Project Closure Report

Ref. No: 

Date: 

To
The Dean UCRD
Galgotias University
Greater Noida.

Subject: Project Closure Report

Consultancy for:
Consultancy Team Members:
Duration:
Problem Identified:
Problem Details:
Solutions Suggested:
Consultancy Fee:
Mode of Payment: Cash or NEFT

With Regards

Dean
## 27. Seed Fund Detail Formats

### Seed Fund Formats Index

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<tr>
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<td>Proforma For Submission of Seed Fund Proposal</td>
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### 27.1. Seed Funding Summary

#### a. Pre-Review Report of Seed Funding Research Proposals

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#### b. Review Report of Seed Funding Research Proposals

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</tbody>
</table>

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Page 172 of 236
27.2. Circular

CALL FOR SEED FUND PROPOSAL

University Centre of Research and Development (UCRD), Galgotias University is Inviting Research Proposal from Faculty Members/ Research Scholars/ UG/PG Students from all the Schools and collaborations with outside Organizations/Industries.

The UCRD Department team will be assisting them to get funds from Industry and other Government/Non-Government Funding Organizations.

1. The budget of the Proposal should be minimum 03 Lakhs and Not to exceed 10 Lakhs.
2. The proposal format is attached herewith. The last date for submitting the proposal is
3. The project can involve UG/PG/Ph.D students if needed.
4. The project needs to involve more than one school for Interdisciplinary Research.
5. The proposal needs to address Social issues/ Beneficial for Community.

UCRD Department team will review the Proposal and Suggest avenues for Funding Opportunities. The hard copy as well soft copy of the proposal needs to be submitted as undersigned. Please find enclosed the Performa for Seed funding Proposals and fill the following points as given in annexure.

Registrar
PROFORMA FOR SUBMISSION OF SEED FUND PROPOSAL

Part I: General Information

1. Project Title (should be focused not exceeding 15 words):

2. i. Name of Principal Investigator:

   ii. Name of Co-Investigator:

3. Collaboration if any, give details of institution(s)

4. Any Project(s) previously sanctioned by any funding agency? If yes give the details:

<table>
<thead>
<tr>
<th>SN</th>
<th>Title of the Project</th>
<th>File No.</th>
<th>Name of Division and funding agency (DST/DBT…)</th>
<th>Date of completion / status</th>
<th>Amount (Rs lakh)</th>
<th>Whether final project completion report has been submitted (if yes, mention date)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

5. Whether project activities require any clearance from relevant authorities in respect of any environmental/legal/ethical issues?

6. Duration (months):

7. Cost (Rs. in Lakhs): Recurring

   Non-recurring

8. Enclose the following while submitting the application form:

   Duly filled application form (complete with all Annexures)- 5 hard copies plus 1 soft copy on a CD

   Bio-data of the PI & Co-I - 5 copies

Part II: Proposal Summary

1. Origin of the Proposal: (Maximum 1 page)

   (Scientific/Technical rationale for doing this work should be elaborated)

2. Objectives (Only 4-5 focused one that can be observed, measured or clearly assessable)

   i. 
3. Review of status of Research and Development in the subject
3.1 International Status: (Maximum 2 pages)
(Researchers working in the area worldwide and their contributions must be properly highlighted with recent references and reviews. A correct and faithful description of the international research status must be given)
3.2 National Status: (Maximum 1 page)
(Same as above to cover the contribution of Indian Scientists in the project area)
3.3 Importance of the proposed project in the context of current status (Maximum 1 page)
(Highlight what is the new area or gap which will be solved in the project in relating to what is already known. This is a very important section to project the novelty content of the proposal)
3.4 If the project is location specific, basis for selection of location be highlighted:
(Maximum 1/2 page)

4. Work Plan:
4.1 Methodology: (Maximum of 5 pages)
(It should contain all the details of how each of the objectives will be addressed. This section must be detailed and have clear plans, not vague and generalized statements. It should have several schemes, tables, figures, equations etc. in addition to text, explanation and justification of why the project research plan will work)
4.2 Time Schedule of activities giving milestones through BAR diagram. (Maximum 1 page)
4.3 Suggested Plan of action for utilization of research outcome expected from the project. (Maximum ½ page)
4.4 Environmental impact assessment and risk analysis. (Maximum ½ page)

5. Expertise:
5.1 Expertise available with the investigators in executing the project: (Maximum 1 page)
(Professional expertise existing with each of the investigators in terms of publications, Patents and preliminary results, to execute every component of the proposal should be highlighted)
5.2 Summary of roles/responsibilities for all Investigators:
(If the proposal contains more than one Investigator, it is important to clearly mention the role of each Investigator in implementing the objectives of the proposal. The Board does not encourage Investigators who do not have specific scientific role in the proposal)

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of the Investigators</th>
<th>Roles/ Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.3 Key publications published by the Investigators pertaining to the theme of the proposal during the last 5 years
5.4 Bibliography

6. List of Projects submitted/implemented by the Investigators
(All the Investigators should list out details of the Projects submitted, implementing and completed by them. The list should start with the Projects implemented by the Principal Investigator, followed by Co-PI1, Co-PI 2 etc.)

6.1 Details of Projects submitted to various funding agencies:

<table>
<thead>
<tr>
<th>SN</th>
<th>Title</th>
<th>Cost in Lakh</th>
<th>Month of submission</th>
<th>Role as PI/Co-PI</th>
<th>Agency</th>
<th>Status</th>
</tr>
</thead>
</table>

6.2 Details of Projects under implementation

<table>
<thead>
<tr>
<th>SN</th>
<th>Title</th>
<th>Cost in Lakh</th>
<th>Duration</th>
<th>Role as PI/Co-PI</th>
<th>Agency</th>
</tr>
</thead>
</table>

6.3 Details of Projects completed during the last 5 years

<table>
<thead>
<tr>
<th>SN</th>
<th>Title</th>
<th>Cost in Lakh</th>
<th>Duration</th>
<th>Role as PI/Co-PI</th>
<th>Agency</th>
</tr>
</thead>
</table>

7. List of facilities required from Galgotias University for the project implementation.

7.1 Infrastructure Facilities

<table>
<thead>
<tr>
<th>SN</th>
<th>Infrastructural Facility</th>
<th>Yes/No/ Not required Full or sharing basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Workshop Facility</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Water &amp; Electricity</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Laboratory Space/ Furniture</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Power Generator</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>AC Room or AC</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Telecommunication including e-mail &amp; fax</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Transportation</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Administrative/ Secretarial support</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Information facilities like Internet/Library</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Computational facilities</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Animal/Glass House</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Any other special facility being provided</td>
<td></td>
</tr>
</tbody>
</table>

7.2 Equipment available with the Galgotias University/ Other Institutes for the project:
<table>
<thead>
<tr>
<th>Equipment available with</th>
<th>Generic Name of Equipment</th>
<th>Model, Make &amp; year of purchase</th>
<th>Remarks including accessories available and current usage of equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI &amp; his group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI's Department</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Institute(s) in the region</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7.3 Total Budget (Rs. in Lakhs):
- Recurring Cost (Rs):
- Non-Recurring Cost (Rs):

<table>
<thead>
<tr>
<th>SN</th>
<th>Item</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1st Yr</td>
</tr>
<tr>
<td>A</td>
<td>Recurring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Manpower</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Consumables</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Travel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Field testing, Demo/ Training expenses (if applicable)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Contingencies/Other costs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Institutional Overheads*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Any other item</td>
<td></td>
</tr>
</tbody>
</table>

| B  | Non-Recurring               |        |        |        |       |
|    | Permanent equipment         |        |        |        |       |
|    | Construction of work shed/structures |  | | | |
|    | Fabrication of prototype equipment | |   | | |
|    |                             |        |        |        |       |

Grand Total (A+B)

A. Recurring:
1. Budget for Manpower

<table>
<thead>
<tr>
<th>SN</th>
<th>Designation</th>
<th>No.</th>
<th>Qualification &amp; experience</th>
<th>Monthly emolument (Rs)</th>
<th>Budget (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1st Yr</td>
</tr>
</tbody>
</table>

i. Only NET/GATE qualified candidates can be appointed as Res. Associate/ SRF/ JRF.
ii. GU would not entertain any request for hike in emolument of project staff during the project period.
iii. Limited funds may be allowed as ‘Honorarium to Experts’ for need-specific consultancy.

2. Budget for Consumables*

<table>
<thead>
<tr>
<th>SN</th>
<th>Description of consumable</th>
<th>Qty./Yr</th>
<th>Budget (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1st Yr</td>
</tr>
</tbody>
</table>

*Includes items like chemicals, raw materials for fabrication, stationery, etc.
3. Budget for Travel

<table>
<thead>
<tr>
<th>SN</th>
<th>Purpose</th>
<th>1st Yr</th>
<th>2nd Yr</th>
<th>3rd Yr</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Project logistics</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2.</td>
<td>Field activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Review meetings (if elsewhere)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

i. International travel is not permitted
ii. Please provide detailed justification for budget proposed under first two headings.

4. Field Testing/ Demo/ Trainings*

<table>
<thead>
<tr>
<th>SN</th>
<th>Description of field testing/demos /trainings</th>
<th>1st Yr</th>
<th>2nd Yr</th>
<th>3rd Yr</th>
<th>Total</th>
</tr>
</thead>
</table>

*Include material for technology field testing/demo, training manuals, training expenses for beneficiaries. Note: For training give details about the subject of training(s), no. of beneficiaries/training, duration of training days, cost /training).

5. Budget for Contingencies*

<table>
<thead>
<tr>
<th>SN</th>
<th>Item</th>
<th>Qty/Yr</th>
<th>1st Yr</th>
<th>2nd Yr</th>
<th>3rd Yr</th>
<th>Total</th>
</tr>
</thead>
</table>

*Includes items like computer time, secretarial assistance, documentation, cost of technology transfers/acquisitions (intellectual fees), lab/field trials, maintenance/servicing of equipment, incidental expenses, etc.

B. Non-Recurring:

Budget for Permanent Equipment/ Workshed/ Structures

<table>
<thead>
<tr>
<th>SN</th>
<th>Equipment/Item details</th>
<th>Qty</th>
<th>Budget (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
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<tr>
<td>2.</td>
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<td>3.</td>
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<tr>
<td>4.</td>
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</tr>
</tbody>
</table>

i. Include installation charges, transport, taxes/duties/levies, etc. Please try to avail tax/duty exemptions as applicable to your institution/organization.
ii. Budgetary quotations will be required for permanent equipment (estimates, if the equipment is to be fabricated locally for prototype testing etc) and other items under non-recurring head, once project is approved for financial support.
iii. Drawings/layouts, etc. prepared by authorized professionals/agencies should be submitted for proposed work shed/structures, if applicable, and supported by documents showing availability of required land along with consent letter from the owner (Panchayat/individual/Govt./etc.).
iv. Proper record should be maintained for the items procured under this Head.

8. Project Duration:_______ months
9. **Deliverables**

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Mark</th>
<th>Brief description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product development/adaptation</td>
<td></td>
<td></td>
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<tr>
<td>Process development/adaptation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology package for development of the project area and local community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology capability development, training &amp; documentation (e.g. reports,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>papers, articles, technology manuals, patents)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientific knowledge and/or data generation leading to technology development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in future</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Please specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. **Name and address of experts/institution interested in the subject / outcome of the project.**

**Part III - Technical Details**

1. **Title** (Short & Focused not exceeding 15 words):

2. **I. Statement of the problem** (200 words):
   i. State the main problem you seek to address:
   ii. Who has this problem, where does it occur?
   iii. How did you come to know of this, did the people who have problem approach you or you visualized it yourself?
   iv. Why is it important to solve it?

   **II. Technology gaps & Suggested solution** (150 words):
   (Describe how the proposal will lead to a novel and effective solution, based on a scientifically and technically sound concept and keeping in view the user needs and local availability of resources)
   i. Outline your idea or solution you plan to develop:
   ii. Did you think up the technological solution within your team or was it thought up in consultation with others (who):

3. **Review of Status** - (100 words): Are you aware of any other initiative related to proposed activities to solve this problem? What were the outcomes?
   (Mention importance of the project in context of the current status, and demonstrate how the project will progress beyond the “state-of-art” or the best initiative tried by others in providing new innovative technological solution to the identified problem and user needs)

4. **Objectives** (Only 4-5 focused that can be observed, measured or clearly assessable):
   i. 
   ii. 
   iii. 

5. **Methodology** (100 words):
   (Describe how the project will leverage livelihood/economic opportunities and solve societal challenges in a sustainable way. Also explain how, and in what way, the project will contribute to
the advancement of knowledge in the subject/topic. Support with defined steps/relevant process details, e.g. flow chart, model, survey procedures, protocols, engineering design/schematic/layout plan - as applicable to achieve the stated objectives)

6. **Work Plan** (150 words - Please also provide activities schedule – Pert Diagram):
   i. **Phase wise work plan of action with time line and deliverables in tabular form** (Describe how the proposal includes a plan for pilot application or trial in a realistic user environment of the technology/product, where the expected impacts to meet end user needs may be demonstrated to the fullest feasible extent).

   ii. **Technology Selection** (State the criteria used for selection of technology for addressing key problem(s) and the assessment of available technologies related to the project)

   iii. **Technology Development/Adoption/Modification/Capacity Building** – as applicable (Provide information on the new R&D/adopted R & D to be carried out for technology development/adoption/ modification and brief description of the technology or training package(s) to be used. Information should be provided on the scale of operation, minimum economic viable scale, estimated cost and likely benefits of the proposed technological intervention):

   iv. **Institutions/places where detailed lab/field testing or experiments will be carried out:**

   v. **Source of Technology:**

<table>
<thead>
<tr>
<th>Source</th>
<th>Name of agency/ institution/ individual expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generated in-house by staff</td>
<td></td>
</tr>
<tr>
<td>Generated in-house by employing outside experts</td>
<td></td>
</tr>
<tr>
<td>Borrowed from an outside institution/ expert</td>
<td></td>
</tr>
<tr>
<td>Modification of technology/ know-how being used by the beneficiaries</td>
<td></td>
</tr>
<tr>
<td>Any other (please specify):</td>
<td></td>
</tr>
</tbody>
</table>

   vi. **Mechanisms for Beneficiaries mobilization & Involvement:**

   (Please indicate how mobilization & participation of beneficiaries in the project work will be ensured)

   - Formation of new technology user group or beneficiaries’ group for project implementation
   - Through demonstration of usefulness of technology or training package
   - Involvement of beneficiaries through formation of enterprises
   - Provision of certificates for participation/proficiency for beneficiaries
   - Involvement of the beneficiaries as trainers and/or trainees
   - Financial contribution by beneficiaries in project execution
   - Material contribution (tools/raw material, labour, etc.) by beneficiaries in project execution handholding through local panchayats/welfare organization
   - Any others (please specify):

7. **Environmental, Legal and Ethical Issues:**
(Explain any environmental, legal and ethical compliance issues. Please mention how these will be addressed & enclose clearance certificate from concerned authorities if required)

8. Deliverables (the list below must correspond with and be derived from # 4, # 5 & # 6. Please also indicate affordability of deliverables to the target beneficiaries):

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Mark</th>
<th>Brief description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product development/adaptation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process development/adaptation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology package for development of the project area and local community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology capability development, training &amp; documentation (e.g. reports, papers, articles, technology manuals, patents)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientific knowledge and/or data generation leading to technology development in future</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Please specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Estimated Benefits (100 words):

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Mark</th>
<th>Brief description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic (Cost-benefit analysis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment generation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental including potential for CDM benefits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (Please specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Please also comments on the possible benefit sharing mechanism of project outcome by different stakeholders.

10. Self- sustainability of the project after GU’s project support is over (30 words):

11. Possibility of replication of project in similar areas (after the proposed technological solution is proven, how it will be distributed? Involving state govt. for large scale technology dissemination or via market or any other means - any entrepreneur or business person involved in the work in any manner?)
27.4. Minute of Meeting Format

Minutes of Meeting
SUB: Pre-Review of Seed Funding Research Proposals

Place: ________________________________ Date of Meeting: ________________________________

<table>
<thead>
<tr>
<th>Members Present</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
</tr>
</tbody>
</table>

The following discussions were held:

- **Point 1**
- **Point 2**
- **Point 3**
- **Point 4**

Dean
Sanction Letter

UCRD Seed Research Funding Approval -01

Note

This is bringing the matter in your kind that Internal and External Reviewers Point Report (Annexure-1 attached) of Seed Funding Project Proposal on Title’ "……………………..” By Prof………………., Principal investigator of the project from School of…………………..

Total Amount Sanctioned with Following Parameters

1. Provisional Patent
2. Proposed:
3. Approval:

The above said fund is for consumable. There will be a bond that needs to be signed for initiation of the project. Final approval of Honorable Vice Chancellor is also attached.

Prepared By: Approved by:

UCRD
Galgotias University, Greater Noida, UP
UP

Vice Chancellor
Galgotias University, Greater Noida, UP
**Closure Letter**

To,
The Dean UCRD
Galgotias University
Greater Noida
Subject: Project Closure Report

<table>
<thead>
<tr>
<th>Project Closure Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultancy for:</td>
</tr>
</tbody>
</table>
| Consultancy Team Members: | Dr. Shweta Thakur Associate Professor School of Law  
Dr. Vijay Kumar Singh, SMAS Galgotias University |
| Duration: 12 Months    |
| Problem Identified:    | “Issue in tax management and Investment planning for Salaried Employees” |
| Problem Details:       | Tax management and Investment planning for Salaried Employees |

**Solutions Suggested:** Construct the house with borrowed capital only, Loan can be taken at a reasonable rate of interest. Gift from friends above Rs. 50,000 is taxable. You can also work on increasing your amount of taxable deductions throughout the year. Depending on your line of work, charitable donations, and a number of expenses, your tax deductions could be substantial. Deductions include personal property taxes, any interest that is paid on your mortgage, charitable donations or gifts, and expenses that are directly related to your job, expenses from investments, state taxes, and more. Over the year, these deductions add up. That’s why you need to keep an itemized list of your expenses throughout the year along with any receipts.

**Consultancy Fee:** 5,00,000/- +GST

**Mode of Payment:** Cash or NEFT

With Regard
Dean
28. Galgotias University Research Awards

### Research Awards Formats

#### 28.1. Research Award Types

<table>
<thead>
<tr>
<th>S/N</th>
<th>Research Award Type</th>
<th>Awards/Amount (Conditions Apply)</th>
<th>Condition Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>As a Resource Person (Keynote Speaker, Govt Recognized FDP, Session Chair in International Conference Scopus Indexed)</td>
<td>1000 - 5000</td>
<td>*Outside GU Only</td>
</tr>
<tr>
<td>2</td>
<td>Consultancy / Research Grants Received/Corporate Training</td>
<td>10000</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Publications in Scopus (Free)*</td>
<td>2000</td>
<td>*Amount will be divided as per author position First/Second/Third (Up to) - INR 2000/1000/500. This will be applicable for those paper in which added with other Affiliation Authors</td>
</tr>
<tr>
<td>4</td>
<td>Publications in SCI (Free)*</td>
<td>5000</td>
<td>*Amount will be divided as per author position First/ Second/ Third/ Fourth (Up to) - INR 5000/ 4000/ 3000/ 2000. This will be applicable for those paper in which added with other Affiliation Authors</td>
</tr>
<tr>
<td>5</td>
<td>Authored Book with Scopus indexed*</td>
<td>8000</td>
<td>*Amount will be divided as per author position First/ Second/ Third / Fourth (Up to) - INR 8000/ 6000/ 4000/ 2000. This will be applicable for those paper in which added with other Affiliation Authors</td>
</tr>
<tr>
<td>6</td>
<td>Edited Book with Scopus indexed*</td>
<td>5000</td>
<td>*Amount will be divided as per author position First/ Second/ Third / Fourth (Up to) - INR 5000/ 3000/ 2000/ 1000. This will be applicable for those paper in which added with other Affiliation Authors</td>
</tr>
<tr>
<td>No.</td>
<td>Description</td>
<td>Amount</td>
<td>Notes</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>Book Chapter with Scopus indexed, Springer, Elsevier*</td>
<td>2000</td>
<td>*Amount will be divided as per author position First/Second/Third (Up to) - INR 2000/1000/500. This will be applicable for those paper in which added with other Affiliation Authors</td>
</tr>
<tr>
<td>8</td>
<td>Publications in Conference Scopus Indexed*</td>
<td>1000</td>
<td>*Amount will be divided as per author position First/Second/Third (Up to) - INR 1000/800/500. This will be applicable for those paper in which added with other Affiliation Authors</td>
</tr>
<tr>
<td>9</td>
<td>National Patent (Self Paid) *</td>
<td>10000</td>
<td>*Amount will be divided as per author position First/Second/Third /Fourth/Fifth/Sixth (Up to) - INR 10000/ 8000/ 6000/ 4000/ 2000/ 1000. This will be applicable for those paper in which added with other Affiliation Authors</td>
</tr>
<tr>
<td>10</td>
<td>International Patent (Self Paid) *</td>
<td>10000</td>
<td>*Amount will be divided as per author position First/Second/Third/ Fourth/ Fifth/ Sixth (Up to) - INR 10000/ 8000/ 6000/ 4000/ 2000/ 1000. This will be applicable for those paper in which added with other Affiliation Authors</td>
</tr>
<tr>
<td>11</td>
<td>Convenor of conference in the University at International level indexed in Scopus</td>
<td>10000</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Citation of papers under the affiliation of Galgotias University, Amount of INR 1000 for 10 citations will be awarded. (10*1=1000) in a year for Scopus Publication</td>
<td>1000</td>
<td>*Session - 1-Jan-2020 to Dec-2020</td>
</tr>
<tr>
<td>13</td>
<td>PhD Awarded under Your Supervision</td>
<td>10000</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>FDP - Organized as a Moderator</td>
<td>5000</td>
<td></td>
</tr>
</tbody>
</table>

*Note: All Authors from Galgotias University The amount will be divided into each author*
28.2. Certificate of Appreciation

Date: 02-Dec-21

Certificate of Appreciation
Research and Innovation Awards 2021

Dr. / Mr. / Ms. ______________________

On behalf of the entire team of Galgotias University, I would like to express our sincere admiration for yours’s outstanding Performance in the Research. We appreciate everything that you have done over the past 01 year. The endless hours you have spent on Research and Academics, and the professionalism you have shown have immensely motivated the entire management team. We heartily acknowledge your unflinching dedication, perseverance and loyalty in bringing laurels to this University.

With utmost pride we would like to put on record that you have exhibited great deal of resilience and prudence and have taken untiring efforts which has culminated into phenomenal success in various projects this institution has embarked upon. Your active participation in various research-oriented activities have brought prestigious awards for the institute. This institution takes immense pride in conferring upon you this award for the academic session 2020 – 2021.

This scroll of honour is being presented to you on __________________at the occasion of celebration of Research Award Ceremony

Once again Best Wishes for Future

Vice Chancellor

Galgotias University

Greater Noida efforts.
29. Patent Data @ GU

GU Patent Formats

29.1. Flow Chart for Patent

Workshop

For Students
For Faculties

Submission of IDF form
Inventor

Innovation Disclosure Form
Primary screening at IPR Cell

Prior Art Search by external agency
Drafting of Patent by external agency

Patent Drafting

Filing of the Patent

Filing of Patent at Indian Patent Office
Consent from the Inventors
### 29.2. Design Registration Form

**DESIGN REGISTRATION FORM**

1. **Particulars Applicant (s) in Capital Letters:**

<table>
<thead>
<tr>
<th>SN</th>
<th>Name</th>
<th>Department</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<tr>
<td>2.</td>
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<tr>
<td>3.</td>
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<td></td>
<td></td>
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<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
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</table>

2. **Corresponding Applicants Name and Address:**

<table>
<thead>
<tr>
<th>Inventor(s) Postal Address Inventor(s) Alternative Address (resi):</th>
<th>Inventor(s) Postal Address Inventor(s) Alternative Address (resi):</th>
<th>Inventor(s) Postal Address Inventor(s) Alternative Address (resi):</th>
<th>Inventor(s) Postal Address Inventor(s) Alternative Address (resi):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile:</td>
<td>Mobile:</td>
<td>Mobile:</td>
<td>Mobile:</td>
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<tr>
<td>E-mail:</td>
<td>E-mail:</td>
<td>E-mail:</td>
<td>E-mail:</td>
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<tr>
<td>Telephone:</td>
<td>Telephone:</td>
<td>Telephone:</td>
<td>Telephone:</td>
</tr>
</tbody>
</table>

3. Name of Article-
   Abstract/SUMMARY/Purpose/Use-PRODUCT-…………………………………….

4. Diagram of the invented product/prototype.
   Ans. The diagram of product is as shown in the diagram below;

5. Isometric and six views of the invented product/prototype

**Important point to note:**

1. Either Product images or CAD Diagram on plain white Background.
2. If line diagram then thickness of lines should not be more than 1 mm and dotted lines are not acceptable
   Ans. The isometric view of the product is as shown below in the diagram;

**ISOMETRIC VIEW 1**

**ISOMETRIC VIEW 2**

**ISOMETRIC VIEW 3**

**FRONT VIEW**

**REAR VIEW**

**RIGHT HAND SIDE VIEW**
29.3. Inventor Disclosure Form

INVENTION DISCLOSURE FORM

GALGOTIAS UNIVERSITY

This is Invention Disclosure Form (IDF), is the first step in the university’s process of Identifying Patents. IDF should be treated as confidential until a patent application filed or invention is publicly disclosed (i.e., via research paper). Accordingly, the information provided in this IDF will be with university and patent expert team of the university.

Please fill in the details with complete information.

1. Particulars of Inventors

<table>
<thead>
<tr>
<th>Mr./Ms/Dr</th>
<th>Name (Full)</th>
<th>Department</th>
<th>Designation</th>
<th>Mobile No.</th>
<th>Email</th>
<th>Postal Address</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

2. Provide a brief descriptive title of the invention:

3. In 100 words or less, please provide an abstract or summary of the invention: (Novel Feature and benefits are important to highlight)

4. Detail description of the invention: (Answer to all below are required in detail)
   a. Problem the invention is solving
   b. Technical features of the invention
   c. General Utility/application of the invention
   d. Advantages of the invention
   e. Best way of using the invention as well as possible variants
   f. Working of invention along with Drawing, schematics and flow diagrams if required with complete explanations
   g. Reference to relevant patent and publication

5. Have you conducted Primary Patent Search? Yes / No (if yes, attach the patent search report)

6. Existing state-of-the-art and prior arts: (Brief background of the existing knowledge/product/process in the market)

7. List out the known ways about how others have tried to solve the same or similar problems? Indicate the disadvantages of these approaches. In addition, please identify any prior art documentation or other material that explains or provides examples of such prior art efforts.

<table>
<thead>
<tr>
<th>SN</th>
<th>Existing state of art</th>
<th>Drawbacks in existing state of art</th>
<th>Overcome (how your invention is overcoming the drawback)</th>
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<tbody>
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<td></td>
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</tr>
</tbody>
</table>
8. List the Technical features and Elements of the invention along with the Description of your invention from start to end.
9. List out the features of your invention which are believed to be new and distinguish them over the closest technology.
10. Has the invention been built or tested or implemented? If so, please provide the particulars of the first time it was successfully built or implemented (when, where, by whom, and evidence of this event including written or on-line pointers to documentary evidence): All testing details
11. Briefly state when and how you first conceived this idea?
12. Have you sold, offered for sale, publicly used or published anything related to this invention? If yes, please briefly explain the dates and circumstances. List those individuals to whom you have revealed your invention. Were non-discloser documents signed prior to discloser in each case? Please state any deadlines of which you may be aware for filing an application on this invention.
13. Include any reasons that your invention would not have been obvious to someone of average skill in the art.
14. Additional comments by the inventor (if you want to give more details out of scope of this IDF).
15. Drawings/Flowchart/Table

LEFT HAND SIDE VIEW
TOP VIEW
BOTTOM VIEW
29.4. Letter of consent/No Objection certificate

Letter of consent/No Objection certificate

I, undersign ........................ working as .............................................. at Galgotias University undertake that I, have filed a patent having title- .......................................................... patent application number...................... dated on........................mentions address of this University. I am assigning this patent to this University. The Declaration is a call for inventor about no claim from other than this university to show their support for patent filing/publishing or Grant.

I certify that I have read and understand the above statement.

Name:

Signature:
Date:
GU Id:
Mobile Number
Email Id:
Official Address:
### Student Project Formats Index

<table>
<thead>
<tr>
<th>SN</th>
<th>List of Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Information for Participants</td>
</tr>
<tr>
<td>2.</td>
<td>Consent Form-Participants</td>
</tr>
<tr>
<td>3.</td>
<td>Application for Permission for Studies on Human Subjects</td>
</tr>
<tr>
<td>4.</td>
<td>Research Group Count</td>
</tr>
</tbody>
</table>
30.1. Information for Participants

PART 1 - CONTENT FOR CONSENT FORM
INFORMATION FOR PARTICIPANTS OF THE STUDY

Instructions - This is the patient information sheet. It should address the participant of this study. Depending upon the nature of the individual project, the details provided to the participant may vary. A separate consent form for the patient/test group and control (drug/procedure or placebo) should be provided as applicable. While formulating this sheet, the investigator must provide the following information as applicable in a simple language in English/Regional language, which can be understood by the participant

- Title of the project
- Name of the investigator/guide
- Purpose of this project/study
- Procedure/methods of the study
- Expected duration of the subject participation
- The benefits to be expected from the research to the participant or to others and the post trial responsibilities of the investigator
- Any risks expected from the study to the participant
- Maintenance of confidentiality of records
- Provision of free treatment for research related injury
- Compensation of the participants not only for disability or death resulting from such injury but also for unforeseeable risks.
- Freedom to withdraw from the study at any time during the study period without the loss of benefits that the participant would otherwise be entitled
- Possible current and future uses of the biological material and of the data to be generated from the research and if the material is likely to be used for secondary purposes or would be shared with others, this should be mentioned
- Address and telephone number of the investigator and co-investigator/guide
- The patient information sheet must be duly signed by the investigator
PART 2 - CONTENT FOR PARTICIPANT CONSENT FORM

Participant’s name:                                      Address:

Title of the project:

The details of the study have been provided to me in writing and explained to me in my own language. I confirm that I have understood the above study and had the opportunity to ask questions. I understand that my participation in the study is voluntary and that I am free to withdraw at any time, without giving any reason, without the medical care that will normally be provided by the investigating team. I agree not to restrict the use of any data or results that arise from this study provided such a use is only for scientific purpose(s). I have been given an information sheet giving details of the study. I fully consent to participate in the above study.

Signature of the Participant: ______________________  Date: _____________

Signature of the Witness: __________________________  Date: _____________

Signature of the Investigator: ______________________  Date: _____________

Note: Consent form part 2, should be appropriately worded for adults and children (less than 18 years) e.g. If the participant is less than 18 years of age, instead of ‘my participation’, ‘my child’s/ward’s participation’ needs to be replaced
30.3. Application for Permission for Studies on Human Subjects

FORM - 1
APPLICATION FOR PERMISSION FOR STUDIES ON HUMAN SUBJECTS

1. School Name:

2. Name of Investigator: 
   Designation:

3. Email Address and Phone No. of Investigator:

4. Place where study will be conducted:

5. Date of commencement & duration of study:

6. Funding agency / sponsor:

Investigator’s Declaration

Certified that

1. The research proposal is not duplicative of previously reported research
2. All investigators working on this proposal are aware of the ICMR ethical guidelines
3. I / we have reviewed the pertinent scientific literature
4. I / we will obtain approval from RESEARCH ETHICS COMMITTEE before initiating any deviation / changes in the study
5. The study shall be initiated only upon review & approval of RESEARCH ETHICS COMMITTEE
6. I /we shall maintain all the records as per format [ form 2 or 4]
7. Informed consent will be obtained & confidentiality of the subjects will be maintained

Place:
Date

Chief Investigator

For Office use only

Proposal number

Date of receipt 
Date received after revision

Approval date 
Expiry date

Secretary 
Chairman
**30.4. Proforma for routine UG/PG class work (Practical’s) involving Human/Animal**

**FORM -2 (For Practical Labs only)**

Proforma for routine UG/PG class work (Practical’s) involving Human/Animal Subjects.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Name of the School</td>
</tr>
<tr>
<td>2.</td>
<td>List of Practical’s and their Nature in brief: (Including Objectives and Methods to be employed)</td>
</tr>
<tr>
<td>3.</td>
<td>Specify the method of Subject selection for Practical class work: (a) UG/PG Students (b) Patients (c) Students (from other Institutions) (d) Any other, specify</td>
</tr>
<tr>
<td>4.</td>
<td>Specify the source of obtaining blood samples:</td>
</tr>
</tbody>
</table>

**UNDERTAKING**

It is certified that,

Work is conducted purely as part of routine curriculum by UG/PG students.

Signature of the Teacher-in-charge.  
Chairperson
### 30.5. Application for Permission for Studies on Human/Animal Subjects

**FORM – 3**

Application for Permission for Studies on Human/Animal Subjects

<table>
<thead>
<tr>
<th>Details</th>
<th>Name &amp; Designation / Qualification</th>
<th>Address Tel &amp; Fax no Email</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of PI/ PhD candidate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Guide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-PI, if any</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research fellow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place where study will be conducted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date of commencement &amp; Duration of study</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funding agency / sponsor</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Investigator’s Declaration**

**Certified that**

1. The research proposal is not duplicative of previously reported research
2. All investigators working on this proposal are aware of the ICMR ethical guidelines
3. I/we have reviewed the pertinent scientific literature
4. I/we will obtain approval from Research Ethics Committee before initiating any deviation/changes in the study
5. The study shall be initiated only upon review & approval of Research Ethics Committee
6. I/we shall maintain all the records as per format [form 2 or 4]
7. Informed consent will be obtained & confidentiality of the subjects will be maintained

Place: 
Date: 

Chief Investigator

**For Office use only**

Proposal number
Date of receipt
Date received after revision Approval date
Expiry date

Secretary

Chairman
### 30.6. Proforma for submission to University Research Ethics Committee, for undertaking studies involving human subjects

#### University Research Ethics Committee
**FORM – 4**

Proforma for submission to University Research Ethics Committee, for undertaking studies involving human subjects

<table>
<thead>
<tr>
<th>1. Title:</th>
<th>Tick one: PhD Sponsored project PG/UG dissertation</th>
</tr>
</thead>
</table>

| 2. Details of Investigating Team: |
| --- | --- | --- | --- |
| Name & Designation / Qualification | Dept. Address Tel & Fax no Email | Signature |
| Investigator | | |
| Research Guide | | |
| Any Others | | |
| Name of sponsor | | |
| Expertise of the investigating team | | |

<table>
<thead>
<tr>
<th>3. Type of Study:</th>
<th>Epidemiological</th>
<th>Basic Sciences</th>
<th>Survey</th>
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<tbody>
<tr>
<td>Clinical: Single center</td>
<td>Multicentric</td>
<td>Behavioral</td>
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</tr>
<tr>
<td>(b) Data Collection:</td>
<td>From Records</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using Questionnaire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any other, specify:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 4. Duration of the study: | |
| Probable date of initiation: | |
| Completion: | |

| 5. Pre-clinical studies done, if any: |
| (in brief) |
| Publications, if any: | |
Note: It is compulsory to provide all the required information, incomplete applications will be rejected.

6. **Study design**
   [Brief description of the proposal – Introduction, aim(s) & objectives, justification for study, methodology describing number of subjects, Inclusion / exclusion criteria, dosages of drug, duration of treatment, potential risks & benefits, outcome measures, statistical analysis and whether it is of national significance with rationale. Attach sheet with maximum 500 words. See page 4 for more details]

7. Will any advertising be done for recruitment of Subjects?  
   (posters, flyers, brochure, websites – if so kindly attach a copy)

8. Does the study involve  
   (a) Anthropometric Measurements : Yes / No  
   (b) Blood samples : Yes / No  
   (c) Urine analysis : Yes / No  
   (d) Lifestyle modification : Yes / No  
   (e) Other (specify).  
   If answer is Yes to (b) & (c) mention the tests

9. **Intervention Studies – Oral**  
   (a) Product evaluation : Yes / No  
   (b) Dietary : Yes / No  
   (c) Synthetic : Yes / No  
   (d) If Yes, is toxicological evaluation carried out.  
   (e) Known medication : Yes / No  
   If yes, give a brief summary of dosage, administration, Contra indications (if any)

10. Use of biological/hazardous material : Yes No (If the answer is Yes, give details)

11. **Consent** :  
   Subject consent form - enclose  
   i. Written Oral  
   ii. Who will obtain consent ?  
   PI/Co-PI Nurse/Counsellor Research staff Any other  

12. **Risks & Benefits**:  
   Is the risk reasonable compared to the anticipated benefits Yes No to subjects / community / country?  
   Is there physical / social / psychological risk / discomfort? Yes No  
   i. Is there a benefit to the subject ? Direct Indirect  
   Benefit to society Direct Indirect if yes, explain
13. i. Are the subjects remunerated for their involvement in the research?  
   Yes                    No  
   ii. If yes, is this remuneration provided irrespective of their social and economic conditions?  
   iii. Compensation for travel, Specify amount and type:  

14. Data Monitoring  
   i. Is there a data & safety monitoring committee  
   ii. Is there a plan for reporting of adverse events?  
       If Yes, reporting is done to:  
       Sponsor                  Ethics Committee  

15. Is there any conflict of interest?  
   (financial/non-financial)  
   If Yes, specify:  

(Signature, Name & Designation of the Applicant)  
Place:  
Date:  

___________________________________________________________  
Checklist for attached documents:  
1. Form 1- 1 copy  
2. Project proposal – 2 Copies (Form 2 or 4 as applicable)  
3. Informed Consent form -1 copy  
4. Investigator’s brochure for recruiting subjects, if any  
5. Advertisement /Information brochures  
6. Copy of clinical trial protocol and/or Questionnaire  
7. Ph. D Registration confirmation letter  
8. Project sanction copy  

Note: one copy each of Items 4, 5 & 6 to be attached only if applicable to the study.
# Student Project Formats

## Student Project Formats Index

<table>
<thead>
<tr>
<th>SN</th>
<th>List of Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Student Project Summary</td>
</tr>
<tr>
<td>2</td>
<td>Research Group Format</td>
</tr>
<tr>
<td>3</td>
<td>Research Group Minutes of Meeting</td>
</tr>
<tr>
<td>4</td>
<td>Research Group Count</td>
</tr>
</tbody>
</table>
### 31.1. Student Project Summary

<table>
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<th>Total No. of Projects</th>
<th>Review 1</th>
<th>Review 2</th>
<th>Review 3</th>
<th>Journal Target</th>
<th>Conference Target</th>
<th>Patent Target</th>
<th>Product Target</th>
<th>Other Target</th>
<th>Total</th>
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### 31.2. Student Project and Review Formats

<table>
<thead>
<tr>
<th>Project Group No.</th>
<th>Research Group</th>
<th>Admission Number</th>
<th>Enrollment Number</th>
<th>Student Name</th>
<th>Program Branch/Section</th>
<th>Seme ster</th>
<th>Student Email-ID</th>
<th>Student Mobile Number</th>
<th>Categ ory</th>
<th>Group Count</th>
<th>Guide Name</th>
<th>Guide Email Id</th>
<th>Guide Mobile Number</th>
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</table>

<table>
<thead>
<tr>
<th>Title of the Project</th>
<th>Approval Form</th>
<th>Abstract Status</th>
<th>Area / Domain</th>
<th>Outcomes</th>
<th>Conference Paper / Journal / Patent / Product</th>
<th>Whether attended the paper writing / Research Workshop by UCRD</th>
<th>Review 1 Date</th>
<th>Review 1 Comments (Minimum three)</th>
<th>Research Paper Status % of Paper Written</th>
<th>Marks out of 30 (In Binary)</th>
<th>Action taken on Review 1</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Review 2 Date</th>
<th>Review 2 Comments (Minimum three)</th>
<th>Research Paper Status % of Paper Written</th>
<th>Marks out of 30</th>
<th>Action taken on Review 2</th>
<th>Review 3 Date</th>
<th>Review 3 Comments (Minimum three)</th>
<th>Research Paper Status % of Paper Written</th>
<th>Marks out of 40</th>
<th>(R1+R2+R) Final Status</th>
<th>Final Review Status</th>
<th>Total Marks Obtained (R1+R2+R) 100</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
### 31.3. Research Group Formats

<table>
<thead>
<tr>
<th>SN</th>
<th>Employee ID</th>
<th>Faculty Name</th>
<th>Designation</th>
<th>Research Group</th>
<th>Sub Domain</th>
<th>Group In-charge</th>
<th>Email</th>
<th>Contact No</th>
</tr>
</thead>
</table>

### 31.4. Research Groups Minutes of Meeting

<table>
<thead>
<tr>
<th>SN</th>
<th>School Name</th>
<th>Faculty Name</th>
<th>Area of Research</th>
<th>Date of Meeting</th>
<th>Time</th>
<th>Minutes of Meeting</th>
</tr>
</thead>
</table>

### 31.5. Research Groups Count

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of Group</th>
<th>No. of Faculty</th>
<th>No. of PG / Ph.D. Students</th>
</tr>
</thead>
</table>

### 31.6. Data of Research Publication Progress Status

<table>
<thead>
<tr>
<th>SN</th>
<th>Project Group No.</th>
<th>Name of Faculty / Student</th>
<th>GU_I_D</th>
<th>Publication Type (Eg: IJ/IC/NC/NJ/Book)</th>
<th>Title</th>
<th>Whether Communicated / Accepted / Published / Indexed</th>
<th>Whether Joint Publication with faculty/UG/PG/Ph.D Students</th>
<th>Submitted to Journal / Conference</th>
<th>Conferenc e / Journal Details</th>
<th>Dat e of</th>
</tr>
</thead>
</table>

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32. Ph.D. Formats

Ph.D. Formats

Ph.D. Formats Index

<table>
<thead>
<tr>
<th>SN</th>
<th>List of Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Proforma For Eligibility as Ph.D. Supervisor</td>
</tr>
<tr>
<td>2.</td>
<td>Flow Chart</td>
</tr>
<tr>
<td>3.</td>
<td>Course Registration Form</td>
</tr>
<tr>
<td>4.</td>
<td>Supervisor Allotment Form</td>
</tr>
<tr>
<td>5.</td>
<td>Constitution of Doctoral Committee</td>
</tr>
<tr>
<td>6.</td>
<td>Doctoral Committee Meeting</td>
</tr>
<tr>
<td>7.</td>
<td>Half Yearly Progress Report</td>
</tr>
<tr>
<td>8.</td>
<td>Performa For Submission of Long Abstract/Synopsis</td>
</tr>
<tr>
<td>9.</td>
<td>NOC from Scholars</td>
</tr>
<tr>
<td>10.</td>
<td>SRC Meeting</td>
</tr>
</tbody>
</table>
32.1. Proforma For Eligibility as Ph.D. Supervisor

Proforma For Eligibility as Ph.D. Supervisor

Name of faculty member:
Designation:
School/Department:
Total experience in years (Teaching, Industry, research):

<table>
<thead>
<tr>
<th>Teaching (yrs)</th>
<th>Industry (yrs)</th>
<th>Research organization (Yrs)</th>
<th>Total (yrs)</th>
</tr>
</thead>
</table>

Experience with Galgotias University (Yrs):
Ph.D. guidance (Scholar name, research topic, University, awarded or in process):

<table>
<thead>
<tr>
<th>Name of Scholar</th>
<th>Supervisor/co supervisor</th>
<th>University</th>
<th>Status (Awarded/In Process)</th>
<th>Vacancy Available With me</th>
</tr>
</thead>
</table>

Publications (Authors, journal name, publisher, UGC/refereed/: Attach separate sheet if necessary

Declaration by faculty member
I hereby declare that
1. My area of specialization is_____________________________________ and details about my experience and Ph.D. guidance as furnished above are true to my knowledge.
2. I will ensure the completion of Ph.D. research scholars registered under me and will not leave the candidate/GU in between. In such cases, I will completely take the responsibility of all research scholars registered under me with GU.
3. I will also inform in writing about my change of employment to keep my candidature as a guide.
4. I will abide the rules and cooperate in guidelines of the Galgotias University.

Signature of Faculty member

Recommendation of Dean of School

Note: Duly filled in Performa has to be submitted to Dean (Research) Office
32.2. Ph.D Programme Flowchart

GALGOTIAS UNIVERSITY
Ph.D Programme Flowchart

Application

Scrutinizing by Department/School

List of eligible applicants to Dean (Ac R)

Call Letter for Test & Interview

Entrance Test & Interview conducted by School

Not Qualified

Best Wishes for Next Time

Qualified

Allotment of Supervisor for eligible candidates
List to Dean (Ac R)

Admission letter to selected candidates

Ph.D Admission at Admission Office

Panel of DC members (Internal & External) to Office of Dean (Ac R)

DC members to be finalized by Dean (Ac R)

1
First DC to be conducted by supervisor to finalize the course works with a min. of 18 credits and Research title.

Ph.D progress review conducted once in six months

- Course work completed with minimum of 18 credits
- Comprehensive Examination
- 2nd DC Meeting - Confirmation of Provisional Registration

Two / More Scopus Web of Science indexed Journal publications

Constitution of Pre-synopsis committee by Dean (Ac R)

Pre-Synopsis Meeting

- Pre-Synopsis Presentation
- Not Satisfied 2nd Pre-Synopsis meeting to be conducted
- Satisfied

Submit the softcopy in CD to Librarian & get plagiarism report which should be less than or equal to 10% except self

Synopsis Meeting with DC Members

Synopsis submission with Panel of 3 Indian & 3 Foreign Examiners

Selection of Indian Examiner and Foreign Examiner from the Panel by VC
Submission of Thesis (2 copies) + 1 copy of Plagiarism report + 1 CD

Comments — Internal Scrutiny Committee

Re submission of Thesis (3 copies + 1 CD) after incorporating corrections mentioned by scrutiny committee

Evaluation of Thesis by Indian & Foreign Examiners

Comments - Indian & Foreign Examiners

Dc meeting to finalize panel of 3 Examiners for Viva Voce

Selecting an Expert member from the panel by VC

Ph.D Viva Voce Exam

Submission of 3 A5 size final thesis, CD of the thesis (3 Copies)

Provisional Certificate by CEO

Graduation
32.3. Course Registration Form

Course Registration Form

1. Name of School: ____________________________________________________________

2. Name of the Ph.D Scholar (in capital letters): ________________________________

3. Father’s Name: ____________________________________________________________

4. Enrollment No.: ___________________________________________________________

5. Programme: Ph.D

6. Course (s) for which student is registering:

<table>
<thead>
<tr>
<th>SN</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit</th>
<th>Year &amp; Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
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<tr>
<td>3.</td>
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<tr>
<td>4.</td>
<td></td>
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</tr>
</tbody>
</table>

Date:

(Signature of Student) (Signature of Guide)

Address and Mobile No:

(Signature of Dean of School)
### 32.4. Supervisor Allotment Form

**GU/Ph.D./20-21/04**

**Supervisor Allotment Form**

(To be submitted to Dean Research)

Name of School:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Name of the Ph. D. Scholar</td>
</tr>
<tr>
<td>2.</td>
<td>Enrollment No.</td>
</tr>
<tr>
<td>3.</td>
<td>Research Area</td>
</tr>
<tr>
<td>4.</td>
<td>Brief Description of the Research Area (Maximum 250 words) Attach separate sheet</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Name of the Supervisor (s)</td>
</tr>
<tr>
<td>6.</td>
<td>Supervisor Contact number</td>
</tr>
<tr>
<td>7.</td>
<td>Contact Number of the Research Scholar</td>
</tr>
<tr>
<td>8.</td>
<td>Signature of the Student</td>
</tr>
<tr>
<td>9.</td>
<td>Signature of the Supervisor (s)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
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<td></td>
</tr>
</tbody>
</table>

(Member SRC) (Member SRC) (Member SRC) (Member SRC)

(Signature, Chairperson SRC)
### 32.5. Constitution of Doctoral Committee

**GU/Ph.D./20-21/05**

**Constitution of Doctoral Committee**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Name of the Candidate and Official Address (E-mail address, Phone/Mobile Number)</td>
</tr>
<tr>
<td>2.</td>
<td>School where registered</td>
</tr>
</tbody>
</table>
| 3. | Category of the Scholar  
   (Please tick the relevant one)  
   (i) Internal: Full Time / Part Time  
   (ii) External: Part Time |
| 4. | Date of Registration |
| 5. | Area of Research |
| 6. | Likely topic of Research |
| 7. | Guide(s) |
| 8. | Research Advisor (if any) |
| 9. | Panel of Experts suggested from the School where registered or other school of the University  
   (Please suggest a minimum of three names) |

<table>
<thead>
<tr>
<th>Name, Designation and School</th>
<th>Area of Specialization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
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<tr>
<td>2.</td>
<td></td>
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<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Area of Specialisation</th>
<th>Complete address for communication (Please give Phone/Mobile, Fax &amp; e-mail also)</th>
</tr>
</thead>
</table>

10. Panel of Experts suggested from other University/Institutions (Please suggest a minimum of three names, all from outside the School, where the candidate is registered. Bio-data of all members suggested from outside the Institute should be enclosed).
Signature of Supervisor

Date:

**Nomination by the Dean**
The following are nominated as external & internal experts for Doctoral Committee

External Expert:
1.

Internal Experts:
1.

2.

Signature of the Dean of the School

(Dean Research)
32.6. Doctoral Committee Meeting

GU/Ph.D./20-21/06

Doctoral Committee Meeting
(Meeting: I/ II/ III)

Name of Research Scholar: _____________________________________________________
Registration No.: ___________________________ Year of Admission: _____________________
Name of School: __________________________________________________________________
Category (Full time/ Part time): __________________________________________________
Address: _______________________________________________________________________
Mobile No.: ________________________ E-mail: ______________________________________

Name of Supervisor: ______________________________________________________________
Name of Joint Supervisor (if any): __________________________________________________

Recommendations of DC (Attach separate sheet if necessary):

Name & Signatures of members present:
  1. 
  2. 
  3. 
  4. 

Signature of Convener (DC)  Signature of Dean of School

Signature of Dean (Research)
# 32.7. Half Yearly Progress Report for the Ph.D Programme

**GU/Ph.D./20-21/07**

**Half Yearly Progress Report for the Ph.D Programme**

**Period (from)_________________________ to ______________________**  
*(To be prepared for a period of six months, specifying month and year)*

<p>| | | | | | |</p>
<table>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Name of Scholar:</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Admission No/Registration No</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3.</td>
<td>Address for Correspondence</td>
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<tr>
<td>4.</td>
<td>E-mail address and Phone/Mobile number</td>
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</tr>
<tr>
<td>5.</td>
<td>Date of joining the Institute as research scholar</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Whether Full-time/Internal Part-Time/External Part Time</td>
<td></td>
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</tr>
<tr>
<td>7.</td>
<td>Details of fee remitted (attach photo copy of the e-receipt)</td>
<td></td>
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</tr>
<tr>
<td>8.</td>
<td>Name &amp; Address of Supervisor</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9.</td>
<td>Name &amp; Address of Research Advisor (if any)</td>
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</tr>
<tr>
<td>10.</td>
<td>Title of the Research topic</td>
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</tbody>
</table>

**A brief report of the progress achieved during the half year period**

<table>
<thead>
<tr>
<th>SN</th>
<th>Title of the Paper</th>
<th>Status of the Paper</th>
<th>Journal/Conference</th>
<th>Indexing (Scopus, SCI)</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

**Plan of work for the next six months: Should be enclosed with the report.**

Place:  
Date: Signature of the Candidate

Signature of Supervisor Signature of the Dean

**Remarks of the Supervisor**
Place: 
Date: 
Signature of the Supervisor

Forwarding remarks of the members of SRC of School in which the candidate is registered (use separate sheet if necessary)

Names and signatures of Members of SRC

1. 
2. 
3. 
4. 

Chairman SRC 
Dean (PG & Ph.D)

Gu/Ph.D./20-21/08

Proforma for Submission of Long Abstract/Synopsis of the Ph.D Thesis
(Note: This Performa duly filled-in in all respects should be submitted along with the synopsis)

1. Name:
2. Address for correspondence:
3. E-mail address, Telephone/Mobile Number:
4. School in which registered:
5. Category (Internal Full-Time/Internal Part-Time/External Part-Time):
6. Date of Registration:
7. Date of Course Completion:
8. List the Courses Completed and grades obtained (Please enclose Xerox copy of the certificate issued by the COE):
9. Date of Comprehensive Viva Voce Examination:
10. Thesis fees payment details: Payment Date……………………, Amount…………….., Receipt No…………….. (Please enclose a copy of fee receipt)
11. Papers published in refereed/UGC /SCI/Scopus Journals

[List out all publications giving the full details like title of the paper, Authors, Name of the Journal, Year and Pages. A separate sheet may be used if needed. Enclose a copy of each of the papers]

Signature of the Candidate

Signature of Guide

32.9. Checklist for submission of Long Abstract/ Ph.D. thesis
1. Minutes of meetings of all three DCs conducted (In original)
2. GU Ph.D. form no 7 to duly filled by candidate and signed by supervisor
3. Ph.D. Fee receipts till date (Xerox copies)
4. Xerox copy of grade sheet issued by COE as a proof of course work completed
5. Plagiarism report of Ph.D. thesis as issued by Chief Librarian
6. Copies of research papers published
(Two papers in international refereed journals with GU affiliation must be published before conducting DC III – GU Ph.D. guidelines 2014)

7. Two panels of examiners (with their bio sketch) each panel consisting five examiners and having at least one examiner from outside India as recommended by SRC for approval of VC through Dean (PG & Research).

8. Soft copy and five hard copies (spiral bound) of long abstract.
32.10. No Objection Certificate

GU/Ph.D./20-21/09

(Following format is to be printed on the letter head of the Organization where the candidate is currently working)

No Objection Certificate

This is to certify that Mr. / Ms. ____________________________ is employed with our organization as ____________________________ since ________________ till date ____________________________. He / She has an experience of __________ years and _______ months in our organization. We allow / relieve him / her to join PhD in ___________________ at Galgotias University, Uttar Pradesh in session _________________ on Full-time / Part-time basis.

It is further certified that he/she will be allowed to use facilities for research work at our Organization.

(Signature & Name of Head of Organization with seal)

Date:
**32.11. SRC Meeting**

**Minutes of Faculty Meeting**

Location: Date:

Attendees:

Time:

**Actions Taken:**

Following Resolutions are made for the upcoming School Research Committee Meeting:

1. Point-1
2. Point-2
3. Point-3
4. Point-4

Minutes Recorded by:

Members Present:

1. 
2. 
3. 
4. 
5. 

Minutes Approved by Dean.
### 32.12. Ph.D. Supervisor Details

<table>
<thead>
<tr>
<th>S N</th>
<th>Name of Faculty</th>
<th>Highest Qualification</th>
<th>Designation</th>
<th>Research Area</th>
<th>Ph.D. students allotted outside of GU</th>
<th>Ph.D. students allotted in GU</th>
<th>Quota available</th>
<th>Vacancy</th>
</tr>
</thead>
</table>

### 32.13. Ph.D. School wise Information Sheet

<table>
<thead>
<tr>
<th>S N</th>
<th>Name of PhD Scholar</th>
<th>Reg. no</th>
<th>Year and month of Enrollmen t</th>
<th>Mb. No. of PhD Scholar</th>
<th>Whether full time or part time</th>
<th>Affiliation of part time scholar</th>
<th>Name of Internal Supervisor</th>
<th>Name of External Supervisor</th>
<th>Affiliation of External Supervisor</th>
<th>Ph. No of Internal Supervisor</th>
<th>Ph. No of External Supervisor</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name of Courses Completed / Pursuing</th>
<th>Status of Course Work</th>
<th>Name of External Expert for DC</th>
<th>Affiliation and Email, Mb no of Expert</th>
<th>DC Conduct ed I / II / III</th>
<th>Fees paid / dues if any</th>
<th>No of seminars presented (Progress report)</th>
<th>No of publications in journals with DOI, name of Journal and publisher</th>
<th>Thesis submitte d or not</th>
</tr>
</thead>
</table>

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### Organizing Conference Formats

#### Organizing Conference Formats Index

<table>
<thead>
<tr>
<th>SN</th>
<th>List of Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Conference Brochure</td>
</tr>
<tr>
<td>2.</td>
<td>To do List</td>
</tr>
<tr>
<td>3.</td>
<td>Springer Proceedings Proposal Form</td>
</tr>
</tbody>
</table>
### 33.1. Conference Brochure

![Conference Logo]

International Conference on _____________(IN-2020-21)

**Date:**

**Venue:**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patron</td>
<td>Mr. Suneel Galgotia, Chancellor, Galgotias University</td>
</tr>
</tbody>
</table>
| Chief Patron                | Mr. Dhruv Galgotia, CEO, Galgotias University  
                          |
|                            | Prof. (Dr.) Preeti Bajaj, Vice-Chancellor, Galgotias University |
| Pro. Vice Chancellor        |                                           |
| Dean Planning               |                                           |
| Dean UCRD                   |                                           |
| General Chair               |                                           |
| Program Chair               |                                           |
| Organizing Chair            |                                           |
| Publication Chair           |                                           |
| Publicity & Public Relation Chair |                       |
| Local Arrangement Chair     |                                           |
| Finance Committee           |                                           |
| Exhibit Committee           |                                           |

**Organized By**

School Name:
Galgotias University, Greater Noida
About School of

Theme of Conference

Guidelines to Author(s)
1) All authors are requested to send soft copy of manuscript (MS-Word format as attached) in single column format and also, plagiarism should be below 10%.
2) Please mail your original manuscript to mention theme of paper and contact details of author in mail.
3) The paper reviewed and scrutinized by the panel of experts. Only original and unpublished work will be accepted. The total length of the paper should not exceed Eight (08) A4 size pages including bibliography and appendices. If exceeds then extra page fee will be applicable.
4) All the accepted papers will be published in the proceedings of International Conference with ISBN No. and in associated International journal, Scopus Indexed with ISSN No.
5) Time allotted is 5-7 minutes for presentation and 3 minutes for Q & A.

Presentation Mode
1) Author can directly present paper and attend the conference at School Name______, Galgotias University
2) Authors those who fail to attend the conference can send PowerPoint presentation of minimum 15 slides and will be published.
3) Authors can give presentation by video conferencing.

Objectives of the Conference
- The conference will create a unique environment for participants to establish professional networks in their respective fields, particularly with representatives from academia.
- To promote scientific and educational activities towards the advancement of the theory and practice of all Management, Engineering and Technology fields and related arts and sciences.
- To bring together Researchers, Engineers, Scholars and Students in the areas of Management, Engineering and Technology, and provides a forum for the dissemination of original research results, new ideas, Research and development, practical experiments, which concentrate on both theory and practices.
- To improve the common man’s life by developing new innovative Engineering ideas, Technical tools or models or products of their need.
- To get new ideas and knowledge, for disseminating to common man, by organizing conference and by publishing high quality academic International research papers.

Advisory Committee

Technical Committee

Important Date(s)
Abstract Submission Deadline
Notification of acceptance of Abstract
Full Paper Submission Deadline

Registration (Inclusive Conference Kit & Lunch)
<table>
<thead>
<tr>
<th>Category</th>
<th>Up to</th>
<th>Up to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>Rs. 1200/-</td>
<td>Rs. 1500/-</td>
</tr>
<tr>
<td>Research Scholar (s)</td>
<td>Rs. 1800/-</td>
<td>Rs. 2000/-</td>
</tr>
<tr>
<td>Academician (s)</td>
<td>Rs. 2500/-</td>
<td>Rs. 3000/-</td>
</tr>
<tr>
<td>Industry Delegates</td>
<td>Rs. 3000/-</td>
<td>Rs. 3500/-</td>
</tr>
<tr>
<td>Foreign Author (s)</td>
<td>US $ 150</td>
<td>US $ 170</td>
</tr>
</tbody>
</table>

**Topics include but not limited to**

**Sample**

a) **Track 1**
   - Open Source Technology
   - Artificial Intelligence
   - Internet of Things & Wireless
   - Digital India
   - Data Analytics
   - Grid Computing, Cloud Computing & Mobile Computing
   - Cyber Security
   - Software Engineering

d) **Track 4**
   - Image Procession
   - Sensor Networks
   - VLSI Design & Embedded Systems
   - Medical Electronics
   - Space Communication

e) **Track 5**
   - GIS, GPS & Remote Sensing
   - Modern Construction Project Management
   - Advancement in Pre-stressed Concrete
   - Green and Intelligent Building

f) **Track 6**
   - Physics
   - Chemistry
   - Environment
g) **Track 7**
- E-Business
- Real Estate Management
- HRM and Finance
- Logistics and Supply Chain Management
- Entrepreneurship Management

**Budget:**

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of the Item</th>
<th>Quantity</th>
<th>Amount</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Conference Committee</th>
<th>Committee Name</th>
<th>Committee In charge</th>
<th>Members</th>
</tr>
</thead>
</table>

Signature Dean
### 33.2. To do list for International conference

<table>
<thead>
<tr>
<th>SN</th>
<th>Work</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Conference webpage, speaker biodata and abstract updation</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Registration process, registration fees.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Ticket and accommodation for speakers, Travel schedule of speakers/guests and escorting persons</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Program Schedule</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Session chairs, Invitation, escorting</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Instructions to presenting authors, getting PPT, travel schedule of authors</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Accommodation of authors- hostel rooms, helping to get hotels, sending mail to for hostel rooms booking</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Finalization of catering and banquet, Cultural program for banquet</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Inaugural function invitation, Programme schedule to invitees and authors</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Conference proceeding/ abstract book- Messages, programme team, etc. Soft copy of proceeding in CD/pen drive/ flash drive, 10 hard copies</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Registration kit with all material like prospectus, pen, note pad, program schedule, etc.</td>
<td></td>
</tr>
</tbody>
</table>

**During the conference**

<table>
<thead>
<tr>
<th>SN</th>
<th>Work</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Help Desk- Navigation, layout plan, Local arrangement for authors, information about Local tour if any</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Registration desk with registration sheet and registration kit</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Inaugural function- complete arrangement- minute to minute schedule, etc.</td>
<td></td>
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<tr>
<td>4.</td>
<td>Session conduction:</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Preparation:</strong> Format of paper evaluation during presentation, folders for session chair, stop watch, call bell, laptop, LCD</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Checklist for conduction:</strong> Oral welcome, about rules and timing of presentation, introduction of session chair, floral welcome of session chair, handing over to session chair, presentation of papers, closing remarks by session chair, certificate distribution, memento to session chair, vote of thanks</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Submission:</strong> soft copy of all PPTs, report of session, attendance sheets, receipt of certificate, Attendance sheet, Receipt of certificate, Feedback form from authors appropriate practice, format</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Live streaming/Live telecast</td>
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<tr>
<td>6.</td>
<td>Uploading of photos on WhatsApp, Galgotias activity page, Facebook and other social media on the same day after the completion of event and tagging, website</td>
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<tr>
<td>7.</td>
<td>Catering – breakfast, lunch, tea/coffee break</td>
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<tr>
<td>8.</td>
<td>Banquet arrangement</td>
<td></td>
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<tr>
<td>9.</td>
<td>Escorting of speakers/ guest during their stay- pick up and drop of speakers/ guests</td>
<td></td>
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<tr>
<td>10.</td>
<td>Taking care of honorarium/gift/mementos of speakers/session chair</td>
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<tr>
<td>11.</td>
<td>Press release- press news of day1, Day2</td>
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</tbody>
</table>

**After the conference**
1. Report of Conference
2. 2-3 slides of PPT covering inauguration, speakers, attendee’s information
3. Submission of feedback analysis and feedback forms
4. Submission of Proceeding-one soft copy and hard copy to each library, R&D cell
5. Submission of budget and utilization within two days after the conference
6. Combined Press release for campus buzz or any other print media.
7. Bill settlement
33.3. Springer Proceedings Proposal Form

Springer Proceedings Proposal Form

The following questions are designed to help us get a clear picture of your book proposal and to provide us with information about the readership which will enable us to develop an effective marketing and promotion strategy. Please complete the form as precisely as you can.

Full or working title of the book:

Subtitle:

Name and address of each editor as they should appear on the book cover (i.e. only author(s) or volume editor(s), not the series editors or contributing authors). Please underline surnames.

Please Refer Annexure-I (Consent letter)

<table>
<thead>
<tr>
<th>Name + Title(s)</th>
<th>Address (work + Email + URL)</th>
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<tbody>
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Please attach curriculum vitae (including relevant publications) of each editor

BOOK FORMAT

What will be the approximate final length of your book (approx. 450 words = 1 page)? :

● When do you anticipate being able to submit the first complete draft? :

CONFERENCE PLAN

● Please indicate a conference webpage address and/or a Call for papers.

● Please indicate WHERE and WHEN the conference will take place

● Please list the names of Conference Organizers and Boards

   International Advisory Board
Please Refer Annexure-II (Consent letter)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name</th>
<th>Affiliation</th>
<th>Email</th>
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<tbody>
<tr>
<td>Min 20</td>
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Organizing Body
- Honorary Chair
- General Chair
- General Co-Chair
- Program Chair
- Publicity and Public Relation Chair
- Registration Chair
- Local Arrangement Chair
- Is any society involved in the organization of this conference?
- Please indicate the Conference History (is this one the first edition of the conference? If not, please indicate previous edition of this conference, the number of participants attending them, the conference webpages and, if available, please cite previous proceedings publications related to those
- How many participants do you expect?
- Only proceedings financed by attendance fees and not by direct paper publication payment will be considered for publication. Do you agree with and/or have any comments on that?
- We expect that at least one of the authors for each articles accepted in the book will attend the conference. If the author of accepted papers does not register to the conference, his/her paper should not be included in the book. Do you agree with and/or have any comments on that?

REVIEW PLAN

Please describe the review process as detailed as possible. Our minimum requirements are listed below:

✔ At least two independent reviewers will need to review and approve a paper
✔ A maximum of 10 papers should be assigned to a single reviewer
✔ All the review reports should be submitted to Springer as soon as they will become available (after the notification of acceptance).
✔ Please specify the detailed review time plan (submission deadline, notification of acceptance, submission deadline for revised papers)
Flow – Chart for Review Process

Submission

Basic Criteria

1st Screening (Chief Editor)

Rejected

Accepted

Content Verification

Plagiarism Check

OK

OK

Accepted for Peer Review

Reviewer 1

Reviewer 2

Peer Review

Rejected

Retune Manuscript

Accepted with Major / Minor / No Revision

Chief Editor

Process for Revision

Second Review (Chief Editor)

Rejected

Retune Manuscript

Accepted for Publication

Editorial Board Meeting (Issue designation)

Publish

Publishing Process

Return to Author for Modification

Re Verification

Modified Version

Retune Manuscript
Please list names, affiliation (and webpage, if available) of the reviewers who will be effectively involved in the review process who already gave their availability to review the papers.

Please Refer Annexure-III (Consent letter)

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of the Reviewer with Designation</th>
<th>SN</th>
<th>Name of the Reviewer with Designation</th>
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<td>12.</td>
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<td>21.</td>
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Please indicate the (expected) acceptance rate

The acceptance rate will be 20% to 30% depending upon the originality and Quality of research paper and will also depends on reviewers' comment

SPECIAL INSTRUCTIONS

- Do you use any plagiarism and SciGen detection system?
  
  Yes, we do have legal plagiarism checking software ithenticate. The papers with plagiarism less than 20% will be considered for the conference.

Please be aware that a few people may try to do unprofessional and/or unethical things, e.g. submit fake (automatically generated) papers, submit two or more very similar papers (self-plagiarism, dual publication), present the work of others as if it were their own and without proper acknowledgement, use falsified/fabricated data. A careful review process together with a system to detect plagiarism should make you able to detect those attempts. We will be able to train you in its use. If you have any doubts about any submitted papers, please do not hesitate to contact us.

ABOUT YOUR BOOK

If you have not already provided us with a brief synopsis (approx. 3500 characters), which can also be used as the back-cover text to the reader and provisional table of contents please could you do so when you return this form. Additionally, could you provide us with a list of those features that you feel sets your book apart from others in the field? Please list them in order of importance. If this is not the first edition of your book, please state the improvements over the last edition.
BOOK ORGANISATION

Please provide us with a preliminary description of the structure of your book (e.g. Table of Contents). We usually require a topical organization in different parts e.g. according to the main conference topics.

- Table of Contents

Organizing Committee, International Advisory Board and Technical Programme Committee
Preface from Organising Committee
Technical Sessions-I
Technical Sessions-II
Technical Sessions-III
Technical Sessions-IV

Keywords/Conference Topics
Please list any keywords associated with your book.

- Smart Transportation with urban planning
- Clean energy and environment
- Water Distribution and waste management
- Smart Materials and Structure
- Disaster Management

Competitive literature

What other works have been published on this subject (please give author, title, publisher, year of publication and price where possible)?

- First of its unique type of conference, which will be conducted in our region

MARKET

Please outline the primary and secondary markets for your book. You should include academic and industrial areas and wherever possible please indicate the level the book is aimed at (e.g. Undergraduate, postgraduates, researchers etc.), the academic discipline involved, the titles of courses at which it could be taught, and specific job titles, functions and responsibilities. Please be as detailed as possible.

Primary market

The proceedings will be purchased by under-graduate and Post-graduate students. Re-searchers will be mostly be benefited by the work published by the academicians and the Industry persons who will be publishing their original work. The proceeding will be highly in demand as the conference brings together academicians from three different areas of civil streams. The conference is not restricted to particular area as research and idea does not grow during boundary conditions. The market is wide open even for budding researchers and post graduate students from different disciplines. The Industry ready solutions will also be published in the proceedings will finally benefit the Industry experts to exchange their own ideas and implement them in effective manner. The society will be largely benefited by the conduction of conference in-association with your name.

Secondary market
Diploma students can be also benefitted from the proceedings, Students from nearby Professional colleges Undergraduate and Post graduate from nearby vicinity. Professional societies like Institute of Engineers IE(I), ASCE, ICI, ACCE(I) (students chapter) will to promote nearby affiliated universities as the institute has association with such professional societies.

Other comments or suggestions for promotional activities

- Conferences/Workshops etc. (place/date/contact name)
- Journals for reviews
- Professional societies
- Names and Addresses of persons you know of willing to help promoting and selling the book (e.g. through conferences, lectures or reviewing your book)

Additional Information

Many thanks for taking the time to complete this questionnaire. Your detailed responses will be very helpful in our assessment of the potential market for your proposal and will enable us to reach a decision regarding publication that much sooner.
23. **Remuneration Policy**

The remuneration for International and National Speakers is fixed for facilitating Research.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Experts</th>
<th>Duration</th>
<th>Mode</th>
<th>Amount</th>
<th>Mode</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Guest International Speaker</td>
<td>Minimum 01 Day</td>
<td>Online</td>
<td>Appreciation Letter</td>
<td>Offline</td>
<td>Agra trip for Max two days Stay</td>
</tr>
<tr>
<td>2</td>
<td>Guest National Speaker from Reputed Institute</td>
<td>1-2 Hours</td>
<td>Online</td>
<td>2000</td>
<td>Offline</td>
<td>3000 + TA</td>
</tr>
<tr>
<td>3</td>
<td>Chief Guest for Workshop/Seminar /STTP/FDP (National /International)</td>
<td>Upto 04 Hours</td>
<td>Online</td>
<td>80 USD 2500</td>
<td>Offline</td>
<td>150 USD 3000 + TA</td>
</tr>
<tr>
<td>4</td>
<td>RAC External Member</td>
<td>01 day</td>
<td>Online/Offline</td>
<td>5000</td>
<td></td>
<td>IIT Director-25000, IIT Prof- Rs. 10000, Others- Rs. 5000+TA</td>
</tr>
<tr>
<td>5</td>
<td>Indian Examiner/Foreign Examiner for Thesis Evaluation</td>
<td></td>
<td>Online/Offline</td>
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<tr>
<td>6</td>
<td>Viva Voce for Ph.d</td>
<td>01 day</td>
<td>Honor 3000/- + Conv 2000/-</td>
<td></td>
<td></td>
<td>Rs. 5000/-</td>
</tr>
<tr>
<td>7</td>
<td>Nobel laureate</td>
<td>1-2 Hours</td>
<td>Online</td>
<td>200 USD</td>
<td>Offline</td>
<td>1 Lakh + Business Air Ticket + Accommodation Invitation of Advisory board member of University</td>
</tr>
<tr>
<td>8</td>
<td>External Expert DC Meeting</td>
<td>01 day</td>
<td>Online</td>
<td>2000 Minimum</td>
<td>Offline</td>
<td>3000 Minimum + TA for 6 PhD Students</td>
</tr>
<tr>
<td>9</td>
<td>Practical Exams- (Assistant Professor, Associate Professor, Professor)</td>
<td>01 day</td>
<td>Rs 18/- per student [Minimum Rs. 1500/- &amp; Maximum Rs. 5000/-]</td>
<td></td>
<td>Practical Exams Conveyance (Rs. 15/- per km) [Minimum Rs. 500/- &amp; Maximum Rs. 1800/-]</td>
<td></td>
</tr>
</tbody>
</table>

Dean UCRD