School of Computing Science & Engineering

Program name: B.Tech -Computer Science and Engineering

Program Structure 2022-23

COURSES

Course Type	CONTINUOUS INTERNAL EXAMINATION (CIE)								Semester End Examination (SEE)
	Rubric and Assessment Tools							Total CIE Marks	Max. Marks
	QUIZ 1/AAT	CAT1	QUIZ2/AAT	CAT2	LAB	LAB Test	Course-based Project		
Theory	10	40	10	40	0	0	0	100	100
Blended	0	30	0	30	20	20	0	100	100
Comprehensive	0	30	0	30	20	0	20	100	100

Rubric for Course-based Project

S.No.	Type of Assessment Tools	CIE Marks (Rubric)				
		PPP	TS1	TS2	Viva	Total
1	Course-based Project Work	5	5	5	5	20

PASS REQUIREMENTS

Continuous Internal Examination (CIE) -Should secure 30% of marks in every individual assessment in the CIE and 40% in total; otherwise not permitted to appear in SEE; Condition1-
Condition2-Semester End Examination (SEE) or End Term Examination (ETE)-should secure 40% in the SEE/ETE
Condition3- The overall marks both CIE and SEE together should be more than or equal to 40% to declare pass in a Course.

*-: Students have to secure minimum 30% marks in each assessment to eligible for appearing in ETE/SEE.(minimum 3 marks in QUIZ 1/AAT and QUIZ2/AAT individually & minimum 12 marks each in both CAT1 & CAT2). Same rule applies to all assesment tools.

**-: Student need to secure minimum 40 marks separately in ETE/SEE along with above mentioned criterion to pass the respective Course.

PPP(Preliminary Project Plan)	To submit the PPP before the Quiz1 by a group of 4 students; After Quiz-1 the course faculty shuold approve the PPP and permit the student group to commnece the project.	The preliminary project plan (PPP) provides an initial, overview of the project and all of its known parameters. lt outlines the project's objectives, relevance to the program merit, and conformity to current industry/government policy, proposed methodology, and expected outcomes. lt should also include any known constlaints related to the time frame (Gantt Chart).budget, and, etc.
TS1 (Technical Seminar 1)	After Quiz-1	After the second Quiz, the course faculty member should take 1st review of the status by all the student groups
TS2 (Technical Seminar 2)	After CAT-1	After CAT1 the course faculty member should take the 2nd review of the status by all the student groups
VIVA	After CAT-2	After CAT2 the course faculty member should take the 2nd review of the status by all the student groups

RUBRICS

	Rubrics 1 (..marks)	Rubrics 2 (..marks)	Rubrics 3 (..marks)	Rubrics 4 (..marks)	Rubrics 5 (..marks)	
Lab	Rubrics 1 (..marks)	Rubrics 2 (..marks)	Rubrics 3 (..marks)	Rubrics 4 (..marks)	Rubrics 5 (..marks)	defined by the respective faculty handling the c
Project	Rubrics 1 (..marks)	Rubrics 2 (..marks)	Rubrics 3 (..marks)	Rubrics 4 (..marks)	Rubrics 5 (..marks)	defined by the respective faculty handling the c

Program Structure 2022-23

First Semester

Sl. No.	Course Code	Course Title	L	T	P	S	Credits	Hours	Credits	Contact Hours/week
1	Will be given by ERP	Communication Skills for Engineers	2	0	1	0	3	4	1	1
2	Will be given by ERP	Multi Variable Calculus	3	0	1	0	4	5	1	1
3	Will be given by ERP	Semi conductor Physics / Biology for Engineers	3	0	1	0	4	5	1	2
4	Will be given by ERP	Basic Electrical & Electronics Engg. / Engineering Graphics and Introduction to Digital Fabrication	3	0	1	0	4	5	1	3
5	Will be given by ERP	Programming for Problem Solving - C	3	0	1	1	5	8		
6	Will be given by ERP	YOGA / Environmental Impact Analysis	2	0	0	0	0	2		
		Total credits					20	29		

Second Semester

Sl. No.	Course Code	Course Title	L	T	P	S	Credits	Hours
1	Will be given by ERP	Linear Algebra & Differential Equations	3	0	0	0	3	3
2	Will be given by ERP	Discrete Mathematics / Engineering Mechanics	3	0	0	0	3	3

			L	T	P	S	Credits	Hours
3	Will be given by ERP	Basic Electrical & Electronics Engg. / Engineering Graphics and Introduction to Digital Fabrication	3	0	1	0	4	4
4	Will be given by ERP	Semi conductor Physics / Biology for Engineers	3	0	1	0	4	5
5	Will be given by ERP	Engineeering Workshop / Introduction of Digital System	2	0	1	0	3	4
6	Will be given by ERP	OOPS	3	0	1	1	5	8
7	Will be given by ERP	YOGA / Environmental Impact Analysis	2	0	0	0	0	2
Total credits							22	29

Third Semester								
			Credit Structure					
Sl. No.	Course Code	Course Title	L	T	P	S	Credits	Hours
1	Will be given by ERP	Data Communication and Networking	3	0	1	0	4	5
2	Will be given by ERP	Data Base management System	3	0	1	0	4	5
3	Will be given by ERP	Data Structures & Algorithms	3	0	1	0	4	5
4	Will be given by ERP	Java Programming	3	0	1	1	5	8
5	Will be given by ERP	Minor Project	0	0	0	0	2	0
Elective-01								
6	Will be given by ERP	Cryptographic Fundamentals	3	0	0	0	3	3
6	Will be given by ERP	Software Engineering	3	0	0	0	3	3
6	Will be given by ERP	Cyber Security (Infosys)	3	0	0	0	3	3
6	Will be given by ERP	Optimization Techniques	3	0	0	0	3	3
6	Will be given by ERP	Artificial Ielligence	3	0	0	0	3	3
7	Will be given by ERP	Professional Ethics & Human values	2	0	0	0	0	2
Total credits							22	26

Fourth Semester								
			Credit Structure					
Sl. No.	Course Code	Course Title	L	T	P	S	Credits	Hours
1	Will be given by ERP	Operating System	3	0	1	0	4	5
2	Will be given by ERP	Computer Graphics	3	0	1	0	4	5
3	Will be given by ERP	Analysis and Design of Algorithms	3	0	1	0	4	5
4	Will be given by ERP	Programming in Python	3	0	1	1	5	8
5	Will be given by ERP	Minor Project	2	0	0	0	2	2
Elective-2								
7	Will be given by ERP	Internet of Things (Arduino/ Raspberry Pi)	3	0	1	0	4	5
7	Will be given by ERP	Data Sciences (R Prog)	3	0	1	0	4	5
7	Will be given by ERP	Data Mining and Warehousing (Weka)	3	0	1	0	4	5
7	Will be given by ERP	Network Design and Management (Cisco)	3	0	1	0	4	5
8	Will be given by ERP	English Profiency and Aptitude Building -3	2	0	0	0	0	2
Total credits							23	32

Fifth Semester								
			Credit Structure					
Sl. No.	Course Code	Course Title	L	T	P	S	Credits	Hours
1	Will be given by ERP	Theory of Computation	3	0	0	0	3	3
2	Will be given by ERP	Software Engineering & Testing Methodologies	3	0	0	0	3	3
3	Will be given by ERP	Technical Training-III	3	0	1	1	5	8
4	Will be given by ERP	Major Project	0	0	0	0	2	0
Elective-3								
6	Will be given by ERP	Microprocessor & Interfacing	3	0	0	0	3	3
6	Will be given by ERP	Quantum Computing	3	0	0	0	3	3
6	Will be given by ERP	Soft Computing	3	0	0	0	3	3
6	Will be given by ERP	Machine Learning	3	0	0	0	3	3
6	Will be given by ERP	Modeling and Simulation	3	0	0	0	3	3
Elective-4								
7	Will be given by ERP	Cloud Application	3	0	1	0	4	5
7	Will be given by ERP	Adhoc & Sensors Netwoks	3	0	1	0	4	5
7	Will be given by ERP	Statistical Analysis using R	3	0	1	0	4	5
7	Will be given by ERP	Block Chain	3	0	1	0	4	5
7	Will be given by ERP	Software Defined Network	3	0	1	0	4	5
Total credits							20	22

Sixth Semester								
			Credit Structure					
Sl. No.	Course Code	Course Title	L	T	P	S	Credits	Hours
1	Will be given by ERP	Compiler Design	3	0	0	0	3	3
2	Will be given by ERP	Campus to Corporate	2	0	2	0	4	6
3	Will be given by ERP	Web Technology	3	0	1	1	5	8
4	Will be given by ERP	Technical Training-IV	3	0	1	1	5	6
5	Will be given by ERP	Major Project	0	0	0	0	2	0
Elective-5								
8	Will be given by ERP	Digital Signal Processing	3	0	0	0	3	3
8	Will be given by ERP	Object Oriented Analysis & Design	3	0	0	0	3	3
8	Will be given by ERP	E-Business	3	0	0	0	3	3
8	Will be given by ERP	Network Operating System	3	0	0	0	3	3
8	Will be given by ERP	Robotics Process automation	3	0	0	0	3	3
9	Will be given by ERP	Creativity, Innovation & Entre'ship	3	0	0	0	0	3
Total credits							22	29

Seventh Semester								
			Credit Structure					
Sl. No.	Course Code	Course Title	L	T	P	S	Credits	Hours
1	Will be given by ERP	MOOC-01	3	0	0	0	3	3
2	Will be given by ERP	MOOC-02	3	0	0	0	3	3
3	Will be given by ERP	Research Methodology & IPR	3	0	0	0	3	3
4	Will be given by ERP	Capstone Project	0	0	0	0	6	6
Elective-6								
6	Will be given by ERP	Enterprise Resource Planning	3	0	1	0	4	5
6	Will be given by ERP	Deep Learning	3	0	1	0	4	5
6	Will be given by ERP	Satellite Image Analysis	3	0	1	0	4	5
6	Will be given by ERP	UI&UX	3	0	1	0	4	5
Total credits							19	20

Eighth Semester								
			Credit Structure					
Sl. No.	Course Code	Course Title	L	T	P	S	Credits	Hours
1	Will be given by ERP	Industrial Internship	0	0	3	0	3	6
2	Will be given by ERP	Capstone Project	0	0	9	0	9	18
Total credits							12	24

Total Credits	160