



# GALGOTIAS UNIVERSITY



**GALGOTIAS  
UNIVERSITY**

**NAAC  
GRADE A+**  
Accredited University

## School of Computer Science and Engineering

### Program

**Master of Technology in Computer Science and Engineering**

# Curriculum

| First Semester - M. Tech. (CSE) |             |                                            |                  |   |   |   |               |
|---------------------------------|-------------|--------------------------------------------|------------------|---|---|---|---------------|
| S.N.                            | Course Code | Course Title                               | Credit Structure |   |   |   | Total Credits |
|                                 |             |                                            | L                | T | P | S |               |
| 1                               | 101         | Advanced Design And Analysis Of Algorithms | 3                | 0 | 1 | 0 | 4             |
| 2                               | 102         | Advanced Computer Networks                 | 3                | 0 | 1 | 0 | 4             |
| 3                               | 103         | Advanced Operating Systems                 | 3                | 0 | 0 | 0 | 3             |
| 4                               | 104         | Advanced Software Engineering              | 3                | 0 | 0 | 0 | 3             |
| 5                               | 105         | Technical Seminar                          | 0                | 0 | 2 | 0 | 2             |
| 6                               | 106         | Professional and Communication Skills      | 0                | 0 | 2 | 0 | 2             |
| 7                               | 107         | Advanced Numerical And Statistical Methods | 3                | 1 | 0 | 0 | 4             |
| Total credits                   |             |                                            |                  |   |   |   | 22            |

| Second Semester - M. Tech. (CSE) |             |                                   |                  |   |   |   |               |
|----------------------------------|-------------|-----------------------------------|------------------|---|---|---|---------------|
| S.N.                             | Course Code | Course Title                      | Credit Structure |   |   |   | Total Credits |
|                                  |             |                                   | L                | T | P | S |               |
| 1                                | 201         | Research Methodology              | 3                | 0 | 0 | 0 | 3             |
| 2                                | 202         | Technical Writing                 | 0                | 0 | 2 | 0 | 2             |
| 3                                | 203         | Machine Learning                  | 3                | 0 | 1 | 0 | 4             |
| 4                                | 204         | Cloud based Big Data Systems      | 3                | 0 | 1 | 0 | 4             |
| 5                                | 205         | Program Specific Elective-I       | 3                | 0 | 1 | 0 | 4             |
| 6                                | 206         | Program Elective-I                | 3                | 0 | 0 | 0 | 3             |
| 7                                | 207         | Verbal and Quantitative Reasoning | 0                | 0 | 2 | 0 | 2             |
| Total credits                    |             |                                   |                  |   |   |   | 22            |

| Third Semester - M. Tech. (CSE) |             |                                            |                  |   |   |   |               |
|---------------------------------|-------------|--------------------------------------------|------------------|---|---|---|---------------|
| S.N.                            | Course Code | Course Title                               | Credit Structure |   |   |   | Total Credits |
|                                 |             |                                            | L                | T | P | S |               |
| 1                               | 301         | Quantitative and Communication Proficiency | 0                | 0 | 2 | 0 | 2             |
| 2                               | 302         | M. Tech Dissertation Part-1                | 0                | 0 | 0 | 9 | 9             |
| 3                               | 303         | Program Specific Elective-1I               | 3                | 0 | 1 | 0 | 4             |
| 4                               | 304         | Program Elective-II                        | 3                | 0 | 0 | 0 | 3             |
| Total credits                   |             |                                            |                  |   |   |   | 18            |

| Fourth Semester - M. Tech. (CSE) |             |                            |                  |   |   |    |               |
|----------------------------------|-------------|----------------------------|------------------|---|---|----|---------------|
| S.N.                             | Course Code | Course Title               | Credit Structure |   |   |    | Total Credits |
|                                  |             |                            | L                | T | P | S  |               |
| 1                                | 401         | M. Tech Dissertation-Final | 0                | 0 | 0 | 18 | 18            |

## List of Electives

| S.N. | Course Code | Program Specific Elective-I (Sem II) | L | T | P | S | Credits |
|------|-------------|--------------------------------------|---|---|---|---|---------|
| 1    | 205         | Natural Language Processing          | 3 | 0 | 1 | 0 | 4       |
| 2    | 205         | Full Stack Development               | 3 | 0 | 1 | 0 | 4       |
| 3    | 205         | Soft Computing                       | 3 | 0 | 1 | 0 | 4       |
| 4    | 205         | Bitcoin and Cryptocurrency           | 3 | 0 | 1 | 0 | 4       |

| S.N. | Course Code | Program Elective-I (Sem II) | L | T | P | S | Credits |
|------|-------------|-----------------------------|---|---|---|---|---------|
| 1    | 206         | Distributed Systems         | 3 | 0 | 0 | 0 | 3       |
| 2    | 206         | Blockchain Technologies     | 3 | 0 | 0 | 0 | 3       |
| 3    | 206         | Intelligent Agents          | 3 | 0 | 0 | 0 | 3       |

| S.N. | Course Code | Program Specific Elective-II (Sem III)      | L | T | P | S | Credits |
|------|-------------|---------------------------------------------|---|---|---|---|---------|
| 1    | 303         | Deep Learning Techniques                    | 3 | 0 | 1 | 0 | 4       |
| 2    | 303         | Mastering Database Management and Analytics | 3 | 0 | 1 | 0 | 4       |
| 3    | 303         | Data Mining and Analytics                   | 3 | 0 | 1 | 0 | 4       |
| 4    | 303         | Intrusion Detection and Prevention System   | 3 | 0 | 1 | 0 | 4       |

| S.N. | Course Code | Program Elective-II (Sem III) | L | T | P | S | Credits |
|------|-------------|-------------------------------|---|---|---|---|---------|
| 1    | 304         | Security Practices            | 3 | 0 | 0 | 0 | 3       |
| 2    | 304         | Social Network Analysis       | 3 | 0 | 0 | 0 | 3       |
| 3    | 304         | Computational Compilation     | 3 | 0 | 0 | 0 | 3       |