



Global Academy of Technology

(An Autonomous Institution, affiliated to VTU, Belagavi, recognized by Karnataka and Approved by AICTE, New Delhi.)

B.E. in Computer Science and Engineering (Artificial Intelligence and Data Science)

Scheme of Teaching and Examinations 2024

Outcome Based Education (OBE) and Choice Based Credit System

(CBCS)(Effective from the academic year 2025-26)

H.P. Rajeshwar
Deputy Director
Global Academy of Technology,
Rajarajeshwarinagar, Bengaluru-56

III SEMESTER

| Sl. No | Course and Course Code | | Course Title | Teaching Department (TD) and Question Paper Setting Board (PSB) | Teaching Hours /Week | | | | | Examination | | | Credits |
|--------------|------------------------|-----------|---|---|-------------------------|----------|--------------------|------------|-------------------|-------------|------------|-------------|-----------|
| | | | | | Theory | Tutorial | Practical / Drawin | Self-Study | Duration in hours | CIE Marks | SEE Marks | Total Marks | |
| | | | | | | | | | | | | | |
| 1 | BS | MAT24301A | Discrete Mathematics and Graph Theory | TD: MAT, PSB: MAT | 2 | 2 | 0 | | 03 | 50 | 50 | 100 | 3 |
| 2 | PCC | CSE24302 | Operating Systems | TD: AIDS, PSB: CSE | 3 | 0 | 0 | | 03 | 50 | 50 | 100 | 3 |
| 3 | IPCC | ADS24303 | Python for Data Science | TD & PSB: AIDS | 3 | 0 | 2 | | 03 | 50 | 50 | 100 | 4 |
| 4 | PCC | CSE24304 | Data Structures | TD: AIDS, PSB: CSE | 3 | 0 | 0 | | 03 | 50 | 50 | 100 | 3 |
| 5 | PCCL | CSEL24305 | Data Structures Lab | TD: CSE, PSB: CSE | 0 | 0 | 2 | | 03 | 50 | 50 | 100 | 1 |
| 6 | ESC/ ETC/PLC | ADS24306x | ESC/ETC/PLC | TD & PSB: AIDS | If the course is theory | | | | 03 | 50 | 50 | 100 | 3 |
| | | | | | 3 | 0 | 0 | | | | | | |
| | | | | | If the course is lab | | | | | | | | |
| | | | | | 2 | 0 | 2 | | | | | | |
| 7 | MC | SCK24307 | Social Connect and Responsibility | Any Department | 0 | 0 | 2 | | 03 | 100 | - | 100 | 1 |
| 8 | AEC | ADS24308x | Ability Enhancement Course/Skill Development Course - I | TD & PSB: AIDS | 1 | 0 | 2 | | 03 | 50 | 50 | 100 | 2 |
| 9 | MC | NSK24309 | National Service Scheme (NSS) | NSS coordinator | 0 | 0 | 2 | | 02 | 100 | - | 100 | 0 |
| | | PEK24309 | Physical Education (PE) (Sports and Athletics) | Physical Education Director | | | | | | | | | |
| | | YOK24309 | Yoga | Yoga Teacher | | | | | | | | | |
| Total | | | | | | | | | | 550 | 350 | 900 | 20 |

S.P. Das
12/5/24

Engineering Science Course (ESC/ETC/PLC)

| | | | |
|---------------------------------------|-------------------------------|-----------|-----------------------------|
| ADS24306A | Soft computing techniques | ADS24306C | Introduction to Data Mining |
| ADS24306B | Introduction to Metric Spaces | ADS24306D | Unix Programming |
| Ability Enhancement Course – I | | | |
| ADS24308A | Foundations of Data Science | ADS24308C | MERN |
| ADS24308B | PHP Programming | | |

PCC: Professional Core Course, **PCCL:** Professional Core Course laboratory, **UHV:** Universal Human Value Course, **MC:** Mandatory Course (Non-credit), **AEC:** Ability Enhancement Course, **SEC:** Skill Enhancement Course, **L:** Lecture, **T:** Tutorial, **P:** Practical **S= SDA:** Skill Development Activity, **CIE:** Continuous Internal Evaluation, **SEE:** Semester End Evaluation. **K :** The letter in the course code indicates common to all the stream of engineering. **PROJ:** Project /Mini Project. **PEC:** Professional Elective Course.

Professional Core Course (IPCC): Refers to Professional Core Course Theory Integrated with practical of the same course. Credit for IPCC can be 04 and its Teaching-Learning hours (L : T : P) can be considered as (3 : 0 : 2) or (2 : 2 : 2). The theory part of the IPCC shall be evaluated both by CIE and SEE. The practical part shall be evaluated by only CIE (no SEE). However, questions from the practical part of IPCC shall be included in the SEE question paper. For more details, the regulation governing the Degree of Bachelor of Engineering /Technology (B.E./B.Tech.) 2022-23

National Service Scheme /Physical Education/Yoga: All students have to register for any one of the courses namely National Service Scheme (NSS), Physical Education (PE)(Sports and Athletics), and Yoga(YOG) with the concerned coordinator of the course during the first week of III semesters. Activities shall be carried out between III semester to the VI semester (for 4 semesters). Successful completion of the registered course and requisite CIE score is mandatory for the award of the degree. The events shall be appropriately scheduled by the colleges and the same shall be reflected in the calendar prepared for the NSS, PE, and Yoga activities. These courses shall not be considered for vertical progression as well as for the calculation of SGPA and CGPA, but completion of the course is mandatory for the award of degree.


Head of the Department,
 Dept. of Artificial Intelligence & Data Scienc.
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 Bengaluru - 560 098.


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 Rajarajeshwarinagar, Bengaluru-98

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Scheme of Teaching and Examinations 2024

Outcome Based Education (OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2025-26)



IV SEMESTER

| Sl. No | Course and Course Code | | Course Title | Teaching Department (TD) and Question Paper Setting Board (PSB) | Teaching Hours /Week | | | | Examination | | | | Credits |
|--------------|------------------------|-----------|--|---|-------------------------|----------|--------------------|------------|-------------------|------------|------------|-------------|-----------|
| | | | | | Theory Lecture | Tutorial | Practical/ Drawing | Self-Study | Duration in hours | CIE Marks | SEE Marks | Total Marks | |
| | | | | | L | T | P | S | | | | | |
| 1 | BS | MAT24401A | Probability and Linear Algebra | TD: MAT, PSB: MAT | 2 | 2 | 0 | | 03 | 50 | 50 | 100 | 3 |
| 2 | IPCC | ADS24402 | Statistical Machine Learning | TD & PSB: AIDS | 2 | 0 | 2 | | 03 | 50 | 50 | 100 | 3 |
| 3 | IPCC | CSE24403 | Object Oriented Programming with Java | TD: AIDS, PSB: CSE | 3 | 0 | 2 | | 03 | 50 | 50 | 100 | 4 |
| 4 | PCC | CSE24404 | Design and Analysis of Algorithms | TD: AIDS, PSB: CSE | 3 | 0 | 0 | | 03 | 50 | 50 | 100 | 3 |
| 5 | PCCL | CSEL24405 | Algorithms Laboratory | TD: AIDS, PSB: CSE | 0 | 0 | 2 | | 03 | 50 | 50 | 100 | 1 |
| 6 | ESC/ ETC/ PLC | ADS24406x | ESC/ETC/PLC | TD & PSB: AIDS | If the course is theory | | | | 03 | 50 | 50 | 100 | 3 |
| | | | | | 3 | 0 | 0 | | | | | | |
| | | | | | If the course is lab | | | | | | | | |
| | | | | | 2 | 0 | 2 | | | | | | |
| 7 | UHV | UHK24407 | Universal Human Values | Any Department | 1 | 0 | 0 | | 03 | 50 | 50 | 100 | 1 |
| 8 | AEC | ADS24408x | Ability Enhancement Course/Skill Development Course - II | TD & PSB: AIDS | 1 | 0 | 2 | | 03 | 50 | 50 | 100 | 2 |
| 9 | MC | NSK24409 | National Service Scheme (NSS) | NSS coordinator | 0 | 0 | 2 | | 02 | 100 | - | 100 | 0 |
| | | PEK24409 | Physical Education (PE) (Sports and Athletics) | Physical Education Director | | | | | | | | | |
| | | YOK24409 | Yoga | Yoga Teacher | | | | | | | | | |
| Total | | | | | | | | | | 500 | 400 | 900 | 20 |

GP
25/10/24

H. P. Rajarajeshwar Swam
Dean Academic
Global Academy of Technology,
Rajarajeshwarinagar, Bengaluru-08

| Engineering Science Course (ESC/ETC/PLC) | | | |
|--|------------------------------------|-----------|--|
| ADS24406A | Image Processing | ADS24406C | Introduction to Time Series Analysis |
| CSE24406B | Introduction to Internet of Things | ADS24406D | Computer Organization and Architecture |
| Ability Enhancement Course – II | | | |
| ADS24408A | Data Analytics using Excel | ADS24408C | R Programming |
| ADS24408B | Project Management with GIT | | |
| <p>PCC: Professional Core Course, PCCL: Professional Core Course laboratory, UHV: Universal Human Value Course, MC: Mandatory Course (Non-credit), AEC: Ability Enhancement Course, SEC: Skill Enhancement Course, L: Lecture, T: Tutorial, P: Practical S= SDA: Skill Development Activity, CIE: Continuous Internal Evaluation, SEE: Semester End Evaluation. K : The letter in the course code indicates common to all the stream of engineering. PROJ: Project /Mini Project. PEC: Professional Elective Course.</p> <p>Professional Core Course (IPCC): Refers to Professional Core Course Theory Integrated with practical of the same course. Credit for IPCC can be 04 and its Teaching-Learning hours (L : T : P) can be considered as (3 : 0 : 2) or (2 : 2 : 2). The theory part of the IPCC shall be evaluated both by CIE and SEE. The practical part shall be evaluated by only CIE (no SEE). However, questions from the practical part of IPCC shall be included in the SEE question paper. For more details, the regulation governing the Degree of Bachelor of Engineering /Technology (B.E./B.Tech.) 2022-23</p> <p>National Service Scheme /Physical Education/Yoga: All students have to register for any one of the courses namely National Service Scheme (NSS), Physical Education (PE)(Sports and Athletics), and Yoga(YOG) with the concerned coordinator of the course during the first week of III semesters. Activities shall be carried out between III semester to the VI semester (for 4 semesters). Successful completion of the registered course and requisite CIE score is mandatory for the award of the degree. The events shall be appropriately scheduled by the colleges and the same shall be reflected in the calendar prepared for the NSS, PE, and Yoga activities. These courses shall not be considered for vertical progression as well as for the calculation of SGPA and CGPA, but completion of the course is mandatory for the award of degree.</p> | | | |


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