| 1. | OBJECTIVE | To generate competent manpower in the emengineering and research in the area of AI at | | | | | | | | | |
|----|-------------------------|--|--|-------------------------|----|---|--|--|--|--|--|
| 2. | DURATION (IN MONTHS) | 48 (Full Time) | | | | | | | | | |
| 3. | INTAKE | 30 | | | | | | | | | |
| 4. | RESERVATION | I.Within the sanctioned intake | a) SC (In Percentage) | b) ST (In Percentage | e) | c) Differently abled (In Percentage) | | | | | |
| | | | 15 | 7 | .5 | 3 | | | | | |
| | | II.Over and above the sanctioned intake | a) Kashmiri Migrants (In Seats) b) International Students (In Percentage) | | | | | | | | |
| | | | 2 | | | 20 | | | | | |
| 5. | ELIGIBILITY | Passed 10+2 examination with Physics and Mathematics as compulsory subjects along with one of Chemistry/Computer Science/Electronics/ Information Technology/Biology/Informatics Practices/ Biotechnology/Technical Vocational subject/Agriculture/Engineering Graphics/Business Studies /Entrepreneurship. Obtained at least 45% marks (40% marks in case of candidates belonging to reserved category) in the above subjects taken together. OR Passed D.Voc. Stream in the same or allied sector. (The University will offer suitable bridge courses such as Mathematics, Physics, Engineering drawing, etc., for the students coming from diverse backgrounds to prepare Level playing field and desired learning outcomes of the programme). B.Tech.: Lateral Entry Passed Minimum Three-years/ Two-year (Lateral Entry) Diploma examination with at least 45% marks (40% marks in case of candidates | | | | | | | | | |

विश्वविद्य कृतुम्बक्स

| 110 | I D D.D. | | | | | | | | | | | |
|-----|--------------------------|---|---|-------------------------------------|-----------------------------|--|--|--|--|--|--|--|
| | FEE | | Academic Fee p.a | Institute Deposit | Total | | | | | | | |
| 9. | COURSE & SPECIALISATION | As per Annexure A | | | | | | | | | | |
| 8. | PROGRAMME PATTERN | Semester | | | | | | | | | | |
| 7. | MEDIUM OF INSTRUCTION | English | | | | | | | | | | |
| 6. | SELECTION PROCEDURE | Selection would be based on joint | merit of entrance exam score and P | PCM/PMV aggregate percentage. | | | | | | | | |
| | | OR Passed B.Sc. Degree from a recog Scheduled Caste / Scheduled Trib OR Passed B. Voc/3 year D.Voc. Strea | es) and passed 10+2 examination warm in the same allied sector. (The Co | C, with atleast 45% marks (40% marl | ourses such as Mathematics, | | | | | | | |

| | Indian Students (Amount in INR) | | 330000 | 20000 | 350000 | | | | |
|-----|------------------------------------|--|--|-------|--------|--|--|--|--|
| | International Students | NRI/ PIO/ OCI Category (Amount in US\$) | 6300 | 275 | 6575 | | | | |
| | International Students | Foreign National Category (Amount in US\$) | 1300 | 275 | 1575 | | | | |
| | | | | | | | | | |
| 11. | ASSESSMENT | The courses will have 40% Conting 30% of the total programme credi | er, some courses (not more than | | | | | | |
| 12. | STANDARD OF PASSING | The assessment of the student for each examination is done, based on relative performance. Maximum Grade Point (GP) is 10 corresponding to O (Outstanding). For all courses, a student is required to pass both internal and external examination separately with a minimum Grade Point of 4 corresponding to Grade P. Students securing less than 40% absolute marks in each head of passing will be declared FAIL. The University awards a degree to the student who has achieved a minimum CGPA of 4 out of maximum of 10 CGPA f the programme. | | | | | | | |
| 13. | AWARD OF DEGREE | Bachelor of Technology (Artificia into consideration the performance) | al Intelligence and Machine Learning) will be awarded at the end of the semester 8 examinations of all semester examinations after obtaining a minimum 4.00 CGPA out of 10 CGPA. | | | | | | |

14. CLASSIFICATION OF CREDITS

| Semester | Generic Core | Generic Elective | Specialisation Core | Specialisation Elective | Open Elective | Mandatory Non-Credit Course/s | Non-Credit Audit Course/s | Total |
|----------|--------------|---------------------|------------------------|----------------------------|-----------------|-------------------------------------|------------------------------|-------|
| | | | | Common | 1 | | | |
| 1 | 18 | 0 | 0 | 0 | 0 | 0 | | 18 |
| 2 | 19 | 0 | 0 | 0 | 0 | 1 * |] [| 19 |
| 3 | 20 | 1 | 0 | 0 | 0 | 1 * |] [| 21 |
| 4 | 23 | 2 | 0 | 0 | 0 | 2 * | As per the student's choice | 25 |
| 5 | 23 | 0 | 0 | 0 | 3 | 0 | | 26 |
| 6 | 12 | 10 | 0 | 0 | 3 | 0 |] [| 25 |
| 7 | 12 | 10 | 0 | 0 | 0 | 0 |] [| 22 |
| 8 | 14 | 0 | 0 | 0 | 0 | 0 |] [| 14 |
| Total | 141 | 23 | 0 | 0 | 6 | 0 | 1 | 170 |
| | | | Optio | nal Additional Co | ırses (Honours) | | _ | |
| Total | 0 | 0 | | | 0 | 0 |] [| 20 |

^{*} Satisfactory completion of non credit courses 'Health and Wellness Module I', 'Health and Wellness Module II', 'Vasudhaiva Kutumbakam' and 'Environmental Science' is mandatory for award of degree.

The revised programme structure supersedes the previously approved programme structure dated 11/10/2024 for the programme.



This Programme Structure is aligned with the norms laid down by the University and is approved by the Academic Council.

Hereafter changes (if any) which conform to the policy on "Curriculum Development and Review" would be permissible, subject to revision of the Programme Structure, following the specified processes.

30/10/2025 (R-1)

Director - Academics

THIS IS SYSTEM GENERATED DOCUMENT AND REQUIRES NO SIGNATURE.



Annexure A

| Catalog | Course | | | Specialisation/ Area/ | Sc | Teaching Scheme (Hours Per | | Examination Sci (Marks) | | | heme | - Total | |
|----------------|------------|--|--------|-----------------------|----|----------------------------------|---------|----------------------------|--------|-----|------|---------|-------|
| Course Code | Code | Course Title | Nature | Department | | /eek | | Prac | ctical | The | ory | Credits | Total |
| Code | | | | | L | Т | La b | СА | ESE | CA | ESE | | |
| | | | | Semester : 1 | | | | | | | | | |
| | | | Gene | ric Core Courses | | | | | | | | | |
| TE7697 | 0707220101 | Linear Algebra | BS | | 2 | 1 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7545 | 0707220102 | Chemistry | BS | | 2 | 0 | 0 | 0 | 0 | 20 | 30 | 2 | 50 |
| TE7695 | 0707220103 | Chemistry Lab | BS | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| T7540 | 0707220104 | Basic Electrical and Electronics Engineering | ES | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| T7593 | 0707220105 | Basic Electrical and Electronics Engineering Lab | ES | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| TEE7093 | 0707220106 | Introduction to Artificial Intelligence and Python Programming | ES | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TEE7092 | 0707220107 | Introduction to Artificial Intelligence and Python Programming Lab | ES | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| T6732 | 0707220108 | Critical Thinking | HS | | 1 | 0 | 0 | 0 | 0 | 25 | 0 | 1 | 25 |
| T2646 | 0707220109 | Entrepreneurship Venture | HS | | 1 | 0 | 0 | 0 | 0 | 25 | 0 | 1 | 25 |
| TE7300 | 0707220110 | Tinker Lab | ES | | 0 | 0 | 4 | 50 | 0 | 0 | 0 | 2 | 50 |
| | | | | Total | 12 | 1 | 10 | 80 | 45 | 160 | 165 | 18 | 450 |
| | | | ; | Semester : 2 | | | | | | | | | |
| | | | Gene | eric Core Courses | | | | | | | | | |
| TE7543 | 0707220201 | Calculus | BS | | 2 | 1 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7540 | 0707220202 | Physics | BS | | 2 | 0 | 0 | 0 | 0 | 20 | 30 | 2 | 50 |



Annexure A

| Catalog | Course | | | Specialisation/ Area/ | Sc | achin hem urs F | e | Exam | | Examination Scheme (Marks) | | | | - Total | | |
|----------------|-------------------------------------|---|----|-----------------------|----|-----------------------|---------|------|-----|----------------------------|-------|----|-----|---------|--|--|
| Course Code | Code Course Title Nature Department | | • | eek) | | Prac | ctical | The | ory | Credits | Total | | | | | |
| Code | | | | | L | т | La b | СА | ESE | CA | ESE | | | | | |
| TE7687 | 0707220203 | Physics Lab | BS | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 | | | |
| TE7288 | 0707220204 | Programming in C | ES | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 | | | |
| TE7289 | 0707220205 | Programming in C Lab | ES | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 | | | |
| T7383 | 0707220206 | Communication Skills | HS | | 2 | 0 | 0 | 0 | 0 | 20 | 30 | 2 | 50 | | | |
| T7384 | 0707220207 | Communication skills lab | HS | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 | | | |
| T6873 | 0707220208 | Creative Thinking | HS | | 1 | 0 | 0 | 0 | 0 | 25 | 0 | 1 | 25 | | | |
| TE7690 | 0707220209 | Statistics for Data Science | BS | | 3 | 1 | 0 | 0 | 0 | 40 | 60 | 4 | 100 | | | |
| TE7748 | | Software Tools for Artificial Intelligence and Machine Learning | BS | | 0 | 0 | 2 | 25 | 0 | 0 | 0 | 1 | 25 | | | |
| TE7188 | 0707220211 | Environmental Science * | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | | | Total | 13 | 2 | 8 | 55 | 45 | 165 | 210 | 19 | 475 | | | |
| | | | | Semester : 3 | | | | | | | | | | | | |
| | | | | ric Core Courses | | | | | | | | | | | | |
| TE7539 | 0707220301 | Probability and random processes | BS | | 2 | 1 | 0 | 0 | 0 | 30 | 45 | 3 | 75 | | | |
| TE7544 | 0707220302 | Data Structures and Algorithms | PC | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 | | | |
| TE7546 | 0707220303 | Data Structures and Algorithms Lab | PC | | 0 | 0 | 4 | 20 | 30 | 0 | 0 | 2 | 50 | | | |
| TEE7034 | 0707220304 | Data Preprocessing and EDA Lab | PC | | 0 | 0 | 4 | 20 | 30 | 0 | 0 | 2 | 50 | | | |
| TEE7029 | 0707220305 | Database Concepts for Data Science | ES | | 2 | 0 | 0 | 0 | 0 | 20 | 30 | 2 | 50 | | | |
| TEE7030 | 0707220306 | Database Concepts for Data Science Lab | ES | | 0 | 0 | 4 | 20 | 30 | 0 | 0 | 2 | 50 | | | |



Annexure A

| Catalog | Course | | | Specialisation/ Area/ | Sc | chir hem urs F | e | E | | nation Sc (Marks) | heme | - Total | |
|----------------|-------------------------------------|---------------------------------------|--------|-----------------------------|-------|----------------------|---------|-----|------|----------------------|-------|---|-----|
| Course Code | Code Course Title Nature Department | • | | eek) | | Prac | ctical | The | eory | Credits | Total | | |
| Code | | | | | L | т | La b | СА | ESE | CA | ESE | | |
| T6749 | 0707220307 | Design Thinking | HS | | 2 | 0 | 0 | 0 | 0 | 50 | 0 | 2 | 50 |
| T7510 | 0707220308 | Operating Systems | PC | | 3 | 0 | 0 | 0 | 0 | 75 | 0 | 3 | 75 |
| T7511 | 0707220309 | Operating Systems Lab | PC | | 0 | 0 | 2 | 25 | 0 | 0 | 0 | 1 | 25 |
| TH4788 | 0707220310 | Health and Wellness Module I * | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Mandat ory Non-Cr edit Course | 0 |
| | | | | Total | 12 | 1 | 14 | 85 | 90 | 205 | 120 | 20 | 500 |
| | | Generic Elective | Course | s Group (Choose Any One Co | urse |) | | | | | | | |
| T6872 | 0707220311 | Foundation of Ethics | GE | | 1 | 0 | 0 | 0 | 0 | 25 | 0 | 1 | 25 |
| T6760 | 0707220312 | Introduction to Indian Philosophy | GE | | 1 | 0 | 0 | 0 | 0 | 25 | 0 | 1 | 25 |
| | | | | Total Requir | ed Cr | edits | 3 | 0 | 0 | 25 | 0 | 1 | 25 |
| | | | ; | Semester : 4 | | | | | | | | | |
| | | | Gene | ric Core Courses | | | | | | | | | |
| T6774 | 0707220401 | Principles of Economics | HS | | 2 | 0 | 0 | 0 | 0 | 50 | 0 | 2 | 50 |
| T7909 | | Design and Analysis of Algorithms | PC | | 3 | 0 | 0 | 0 | 0 | 75 | 0 | 3 | 75 |
| T7491 | | Design and Analysis of Algorithms Lab | PC | | 0 | 0 | 2 | 25 | 0 | 0 | 0 | 1 | 25 |
| TE7499 | | Supervised Machine Learning | PC | | 4 | 0 | 0 | 0 | 0 | 40 | 60 | 4 | 100 |
| TE7500 | 0707220405 | Supervised Machine Learning Lab | PC | | 0 | 0 | 4 | 20 | 30 | 0 | 0 | 2 | 50 |



Annexure A

| Catalog | Course | | | Specialisation/ Area/ | | chir hem urs F | e | E | | ation Sc (Marks) | heme | - Total | |
|----------------|------------|---------------------------------|--------|----------------------------|------|----------------------|---------|------|--------|---------------------|------|---|-------|
| Course Code | Code | Course Title | Nature | Department | | eek) | | Prac | ctical | The | ory | Credits | Total |
| Code | | | | • | L | Т | La b | СА | ESE | CA | ESE | | |
| TE7760 | 0707220406 | Unsupervised Learning | PC | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7761 | 0707220407 | Unsupervised Learning Lab | PC | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| TE7290 | 0707220408 | Project Based Learning -I | PIS | | 0 | 0 | 4 | 50 | 0 | 0 | 0 | 2 | 50 |
| TE7542 | 0707220409 | Discrete Mathematics | BS | | 2 | 1 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TEE7098 | 0707220410 | Cyber Security | PC | | 2 | 0 | 0 | 0 | 0 | 50 | 0 | 2 | 50 |
| TH4789 | 0707220411 | Health and Wellness Module II * | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Mandat ory Non-Cr edit Course | 0 |
| SMC001 | 0707220415 | Vasudhaiva Kutumbakam * | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Mandat ory Non-Cr edit Course | 0 |
| | | | | Total | 16 | 1 | 12 | 105 | 45 | 275 | 150 | 23 | 575 |
| | | | , | s Group (Choose Any One Co | urse |) | | | | | | | |
| T6184 | | Basic German I | GS | | 2 | 0 | 0 | 0 | 0 | 50 | 0 | 2 | 50 |
| T6186 | | Basic French I | GE | | 2 | 0 | 0 | 0 | 0 | 50 | 0 | 2 | 50 |
| T6188 | 0707220414 | Basic Spanish I | GE | | 2 | 0 | 0 | 0 | 0 | 50 | 0 | 2 | 50 |



Annexure A

| Catalog | Course | | | Specialisation/ Area/ | Sc | achir hem urs F | e | E | | nation Sc (Marks) | heme | - Total | |
|----------------|------------|--|---------|---------------------------|---------|-----------------------|---------|------|-------|----------------------|------|---------|-------|
| Course Code | Code | Course Title | Nature | Department | • | /eek | | Prac | tical | The | eory | Credits | Total |
| Code | | | | | L | Т | La b | СА | ESE | CA | ESE | | |
| | | | | Total Requir | ed Cr | edit | 3 | 0 | 0 | 50 | 0 | 2 | 50 |
| | | | | Semester : 5 | | | | | | | | | |
| | _ | | | eric Core Courses | | | | | | | • | | |
| T8000 | 0707220501 | Service Learning | HS | | 0 | 0 | 8 | 100 | 0 | 0 | 0 | 4 | 100 |
| F0003 | 0707220502 | Flexi-Credit Course | PC | | 3 | 0 | 0 | 0 | 0 | 75 | 0 | 3 | 75 |
| TE7753 | 0707220503 | Deep Learning | PC | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7754 | 0707220504 | Deep Learning Lab | PC | | 3 | 0 | 0 | 10 | 15 | 0 | 0 | 1 | 25 |
| TE7276 | 0707220505 | Natural Language Processing | PC | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7277 | 0707220506 | Natural Language Processing Lab | PC | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| TE7663 | 0707220507 | Data Visualization Lab | PC | | 0 | 0 | 4 | 20 | 30 | 0 | 0 | 2 | 50 |
| TE7483 | 0707220508 | Applications and use cases of Machine Learning | PC | | 0 | 0 | 4 | 0 | 0 | 20 | 30 | 2 | 50 |
| TEE7033 | 0707220509 | Al Ethics | PC | | 1 | 0 | 0 | 0 | 0 | 25 | 0 | 1 | 25 |
| TE7958 | 0707220510 | Computer Networks | PC | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| | | | | Total | 16 | 0 | 18 | 140 | 60 | 210 | 165 | 23 | 575 |
| | | Open Elective | Courses | Group (Choose Any One Cou | Course) | | | | | | | | |
| TE7677 | 0707220511 | Financial Mathematics | OE | Applied Science | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7700 | 0707220512 | Smart Materials | OE | Applied Science | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7223 | 0707220513 | Smart Urban Planning | OE | Civil Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |



Annexure A

| Catalog | Course | | | Specialization/ Avea/ | Sc | achir hem urs F | e | E | | nation Sc (Marks) | heme | - Total | |
|----------------|------------|--|--------|---|--------|-----------------------|---------|------|--------|----------------------|------|---------|-------|
| Course Code | Code | Course Title | Nature | Specialisation/ Area/ Department | • | eek) | | Prac | ctical | The | eory | Credits | Total |
| Code | | | | | L | т | La b | CA | ESE | CA | ESE | | |
| TE7240 | 0707220514 | Water Resource Planning and Management | OE | Civil Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| T7499 | 0707220515 | Java | OE | Computer Science and Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7750 | 0707220516 | Web Application Development | OE | Computer Science and Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TEE7018 | 0707220517 | Engineering Simulation and Modeling Tools | OE | Electronics and Telecommunication Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7428 | 0707220518 | Introduction to Image Processing | OE | Electronics and Telecommunication Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7810 | 0707220519 | Industrial Revolution and Introduction of Industry 5.0 | OE | Mechanical Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| T7650 | 0707220520 | Six Sigma | OE | Mechanical Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| | | | | Total Requi | red Cr | edits | 3 | 0 | 0 | 30 | 45 | 3 | 75 |
| | | | | Semester : 6 | | | | | | | | | |
| | | | | eric Core Courses | | | _ | | | | 1 | | |
| TE7484 | | Computer Vision | PC | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7485 | | Computer Vision Lab | PC | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 1 | 25 |
| TE7565 | | Reinforcement Learning | PC | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7496 | 0707220604 | Reinforcement Learning Lab | PC | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |



Annexure A

| Catalog | Course | | | Specialisation/ Area/ (H | Sc | chir hem urs F | e | E | xamin (| heme | - Total | | |
|----------------|------------|---|---------|--------------------------------|-------|----------------------|---------|------|------------|------|---------|---------|-------|
| Course Code | Code | Course Title | Nature | Department | • | eek) | | Prac | ctical | The | eory | Credits | Total |
| Code | | | | | L | Т | La b | CA | ESE | CA | ESE | | |
| T7802 | 0707220605 | Capstone Course | PC | | 2 | 0 | 0 | 0 | 0 | 50 | 0 | 2 | 50 |
| TE7291 | 0707220606 | Project Based Learning-II | PIS | | 0 | 0 | 4 | 50 | 0 | 0 | 0 | 2 | 50 |
| | | | | Total | 8 | 0 | 8 | 70 | 30 | 110 | 90 | 12 | 300 |
| | | Generic Elective | | | | | | | | | | | |
| TE7490 | 0707220607 | Generative Adversarial Networks | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7261 | 0707220608 | Internet of Things | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TEE7031 | 0707220609 | Optimization Techniques for Machine Learning | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| | | | | Total Requir | ed Cr | edits | 3 | 0 | 0 | 30 | 45 | 3 | 75 |
| | | Generic Elective | Courses | Group - II (Choose Any One C | ourse | ∍) | | | | | | | |
| TE7491 | 0707220610 | Generative Adversarial Networks Lab | PE | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| TE7262 | 0707220611 | Internet of Things Lab | PE | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| TEE7032 | 0707220612 | Optimization Techniques for Machine Learning Lab | PE | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| | | | | Total Requir | ed Cr | edits | 3 | 10 | 15 | 0 | 0 | 1 | 25 |
| | | Generic Elective | Courses | Group - III (Choose Any One C | Cours | e) | | | | | | | |
| TE7562 | 0707220613 | Speech Systems | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7943 | | Full Stack Development | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7536 | 0707220615 | Embedded Al | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |



Annexure A

| Catalog | Course | Course Title IN | Nature Specialisation/ Area/ (Hours | | hem urs F | e Per | E | | ation Sc (Marks) | | - Total | T-4-1 | |
|----------------|------------|--|---|----------------------------------|--------------|----------|---------|------|---------------------|-----|---------|---------|-------|
| Course Code | Code | Course little | Nature | . Department | W | eek) |) | Prac | ctical | The | ory | Credits | Total |
| Jour | | | | | L | Т | La b | CA | ESE | CA | ESE | | |
| | | | | Total Requir | ed Cr | edits | 5 | 0 | 0 | 30 | 45 | 3 | 75 |
| | | Generic Elective (| ve Courses Group - IV (Choose Any One Course) | | | | | | | | | | |
| TE7563 | 0707220616 | Speech Systems Lab | PE | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| TE7942 | 0707220617 | Full Stack Development Lab | PE | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| TE7535 | 0707220618 | Embedded Al Lab | PE | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| | | | | Total Requir | ed Cr | edits | 5 | 10 | 15 | 0 | 0 | 1 | 25 |
| | | Generic Elective | Courses | Group - V (Choose Any One C | Course | e) | | | | | | | |
| T2585 | 0707220619 | Organizational Behaviour | GE | | 0 | 0 | 2 | 0 | 0 | 50 | 0 | 2 | 50 |
| TE7438 | 0707220620 | History of Science and Technology | GE | | 2 | 0 | 0 | 0 | 0 | 50 | 0 | 2 | 50 |
| | | | | Total Requir | ed Cr | edits | 3 | 0 | 0 | 50 | 0 | 2 | 50 |
| | | Open Elective | Courses | Group (Choose Any One Cou | rse) | | | | | | | | |
| TE7698 | 0707220621 | Nanotechnology | OE | Applied Science | 2 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7676 | 0707220622 | Executive Corporate Communication For Impact | OE | Applied Science | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7195 | 0707220623 | GIS Applications | OE | Civil Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7203 | 0707220624 | Intelligent Transportation Management | OE | Civil Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7297 | 0707220625 | Software Testing Tools | OE | Computer Science and Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |



Annexure A

| Catalog | Course | | | Specialisation/ Area/ | Sc | achir hem urs F | e | E | | nation Sc (Marks) | heme | - Total | |
|----------------|------------|------------------------------------|--------|---|-------|-----------------------|---------|------|--------|----------------------|------|---------|-------|
| Course Code | Code | Course Title | Nature | Department | | /eek) | | Prac | ctical | The | eory | Credits | Total |
| Code | | | | | L | Т | La b | СА | ESE | CA | ESE | | |
| TE7756 | 0707220626 | Open Source Technologies | OE | Computer Science and Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| T7584 | 0707220627 | Printed Circuit Board (PCB) Design | OE | Electronics and Telecommunication Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7334 | 0707220628 | Introduction to Mechatronics | OE | Electronics and Telecommunication Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7804 | 0707220629 | Design Optimization Techniques | OE | Mechanical Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7351 | 0707220630 | 3D Printing and Prototyping | OE | Mechanical Engineering | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| T6725 | 0707220631 | Time Series Analysis | OE | Artificial Intelligence and Machine Learning | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| | | | | Total Requir | ed Cr | edits | S | 0 | 0 | 30 | 45 | 3 | 75 |
| | | | | Semester : 7 | | | | | | | | | |
| | | | | eric Core Courses | | | | | | | | | |
| T7804 | | B.Tech Project | PIS | | 0 | 0 | 8 | 40 | 60 | 0 | 0 | 4 | 100 |
| TE7493 | 0707220702 | Multimodal Al | PC | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7494 | 0707220703 | Multimodal AI Lab | PC | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| TE7552 | 0707220704 | Big Data Analytics | PC | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7554 | 0707220705 | Big Data Analytics Lab | PC | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |



Annexure A

| | | · | | | | | | | | | | | |
|----------------|------------|-----------------------------------|---------|--------------------------------------|-------|----------------------|---------|------|--------|---------------------|------|---------|-------|
| Catalog | Course | | | Specialisation/ Area/ | | chir hem urs F | e | E | | ation Sc (Marks) | heme | - Total | |
| Course Code | Code | Course Title | Nature | Department | | eek) | | Prac | ctical | The | ory | Credits | Total |
| Code | | | | | L | Т | La b | СА | ESE | CA | ESE | | |
| | | | | Total | 6 | 0 | 12 | 60 | 90 | 60 | 90 | 12 | 300 |
| | | Generic Elective | Courses | Group- I (Choose Any One C | ourse |) | | | | | | | |
| TE7534 | 0707220706 | Healthcare informatics | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TEE7094 | 0707220707 | Graph Neural Networks | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7551 | 0707220708 | Block chain Technologies | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| | | | | Total Requir | ed Cr | edits | 6 | 0 | 0 | 30 | 45 | 3 | 75 |
| | | Generic Elective | Courses | Group- II (Choose Any One C | ourse | :) | | | | | | | |
| TE7564 | 0707220709 | AI in Wireless Communications | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7497 | 0707220710 | Responsible Al | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7941 | 0707220711 | MLOps | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| | | | | Total Requir | ed Cr | edits | 5 | 0 | 0 | 30 | 45 | 3 | 75 |
| | | Generic Elective | Courses | Group- III (Choose Any One C | ourse |)) | | | | | | | |
| TE7561 | 0707220712 | AI in Wireless Communications Lab | PE | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| TE7498 | 0707220713 | Responsible Al Lab | PE | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| TE7940 | 0707220714 | MLOps Lab | PE | | 0 | 0 | 2 | 10 | 15 | 0 | 0 | 1 | 25 |
| | | | | Total Requir | ed Cr | edits | 3 | 10 | 15 | 0 | 0 | 1 | 25 |
| | | Generic Elective | Courses | Group- IV (Choose Any One C | ourse |) | | | | | | | |
| TE7560 | 0707220715 | Robotic Process Automation | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |



Annexure A

| Catalog | Course | | | Specialisation/ Area/ | Sc | achin hem urs F | e | E | | ation Sc (Marks) | heme | - Total | |
|----------------|------------|----------------------------|--------|-----------------------|-------|-----------------------|---------|------|--------|---------------------|------|---------|-------|
| Course Code | Code | Course Title | Nature | Department | | eek) | | Prac | ctical | The | ory | Credits | Total |
| Coue | | | | | L | Т | La b | СА | ESE | CA | ESE | | |
| TE7532 | 0707220716 | Smart Society | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| TE7533 | 0707220717 | Al for Banking and Finance | PE | | 3 | 0 | 0 | 0 | 0 | 30 | 45 | 3 | 75 |
| | | | | Total Requir | ed Cr | edits | 3 | 0 | 0 | 30 | 45 | 3 | 75 |
| | | | , | Semester : 8 | | | | | | | | | |
| | | | Gene | ric Core Courses | | | | | | | | | |
| T7912 | 0707220801 | Internship | PIS | | 0 | 0 | 24 | 120 | 180 | 0 | 0 | 12 | 300 |
| T7802 | 0707220802 | Seminar | PIS | | 0 | 0 | 4 | 20 | 30 | 0 | 0 | 2 | 50 |
| | | | | Total | 0 | 0 | 28 | 140 | 210 | 0 | 0 | 14 | 350 |



| Abbreviations (Nature) | Description |
|------------------------|---------------------------------|
| BS | Basic Sciences |
| ES | Engineering Sciences |
| HS | Humanities and Social Sciences |
| OE | Open Electives |
| PC | Professional Core |
| PE | Professional Elective |
| PIS | Project, Internship, Seminar |
| PD | Professional Development Course |
| MC | Mandatory Course |
| L | Lecture |
| T | Tutorial |
| CA | Continuous Assessment |
| ESE | End Semester Examination |
| GE | Generic Elective |

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| Semester | Continuous Assessment | Term End Examination | Total Credits | Total Marks |
|------------|-----------------------|----------------------|---------------|-------------|
| | | Common | | |
| Semester 1 | 4 | 14 | 18 | 450 |
| Semester 2 | 2 | 17 | 19 | 475 |
| Semester 3 | 7 | 14 | 21 | 525 |
| Semester 4 | 12 | 13 | 25 | 625 |
| Semester 5 | 8 | 18 | 26 | 650 |
| Semester 6 | 6 | 19 | 25 | 625 |
| Semester 7 | 0 | 22 | 22 | 550 |
| Semester 8 | 0 | 14 | 14 | 350 |
| Total | 39 | 131 | 170 | 4250 |

