| New   Sect   Course Code   Course Title   L   T   P   C  | Year                                    |  | CSE)                                    |  | ODD SEMESTER   |   | _     |  |   | 18-2022 (Sch |                                 | tudit    |   | EVEN SEMESTER  |                 | _               | _                                     | 30                | OET           |
|--|---|--|---|--|--|---|-------|--|---|--------------|---------------------------------|----------|---|--|-----------------|-----------------|---------------------------------------|-------------------|---------------|
| 1   SE   EPMA 105   Applied Membersched   3   1   - 4  | _                                       | r SN   | io                                      | Course Code  | Course Title   | I   | Т     | P  | C   |              | SNo                             | 0        | Course Code   |  |                 | L               | Т                                     | Р                 | C             |
| 2 SE EIPH 109 Ageled Physics—I   |   | 1  | SE                                      | ETMA 105   | Applied Mathematics-I  | 3   | 1     | -  | 4   |              | 1                               | SE       |   |  | _               | _               | 1                                     | -                 |               |
| 3   1   2   4   5  |   | 2  | SE                                      | ETPH 109   | Applied Physics-I  | 3   | 1     | -  | 4   |              | 2                               | SE       | E ETPH 108  | Applied Physics-II   | _               | _               | 1                                     | -                 |               |
| S   ETCS10    Involution to Compute System and Programming   S   1   4   Revision   S   ETCS10    Involution to Compute System and Programming   S   1   4   Revision   S   ETCS10    Involution to Compute System and Programming   S   1   4   S   ETCS10    |   | -  | -                                       |  | Electrical Science   | 3   | 1     | -  | 4   |              | 3                               | SE       | E ETCH 119  | Engineering Chemistry  |                 | 3               | 1                                     | -                 | 4             |
| S   ETCS101  |   | 4  | SE                                      | ETME 106   | Engineering Mechanics  | 3   | -     | -  | 3   |              | 4                               | SE       | E ETME 10   | 7 Manufacturing Process  | _               | _               | -                                     | -                 |               |
| Total   Process   Programming   Computer South Lab   |   | 5  | SE                                      | ETCS103  | Introduction to Computer System and Programmin   | ng 3  | 1     | -  | 4   | Revision     | 5                               | CC       | ETCS 112  | Object Oriented Programming  |                 |                 | 1                                     | -                 |               |
| Part   |   | 6  | -                                       | ETEL 101   | Communication Skills   | 4   | -     | -  | 4   |              | 6                               | SE       | ETCH 125  | Enviormental Studies   | _               | 3               |                                       |                   | 3             |
| S   ETEL17   Communication Skills Lab  |   | 7  | _                                       | ETPH 151   | Applied Physics-I Lab  | -   | -     | 2  | 1   |              | 7                               | +        | _   |  | $\rightarrow$   | -               |                                       |                   |               |
| 0   SE   ETEC 16   |   | _  |   | ETEL171  | Communication Skills Lab   | -   | -     | 2  | 1   |              | 8                               | -        | _   | 11 /   | -               | -               |                                       | -                 | _             |
| Di SE ETISSIS   Programming Lab  |   | 9  | SE                                      | ETEC 161   | Electrical Science Lab   | 1 -   | -     | 2  | 1   |              | 9                               | -        | _   |  | -               | -               |                                       | -                 |               |
| 11   SE   ETME 154   Biopening Mechanics Lab   |   | -  | _                                       |  |  | -   | -     | 2  | 1   | Revision     | 10                              | _        |   | - January Trogramming Duo  |                 | +               | -                                     | $\rightarrow$     | _             |
| TOTAL  |   | 11   | SE                                      | ETME 154   | Engineering Mechanics Lab  | -   | -     | 2  | 1   |              | 11                              | -        |   |  | _               | -               |                                       | -                 |               |
| SE   ETMA 201   Applied Mathematics III  |   |  |   |  | TOTAL  | 15  | 4     | 10   | 28  |              |                                 |          |   |  |                 | $\rightarrow$   | _                                     | _                 |               |
| 2   SE   FIEC 235   Adays Elementes  |   | _  |   |  |  |   |       |  |   |              |                                 |          |   |  |                 | 10              | -                                     | 12                | 20            |
| 2   SE   ETIC 233   Analysis   ETIC 231   Capacita Systems   |   | -  | _                                       |  | Applied Mathematics-III  | 3   | 1     | -  | 4   |              | 1                               | CC       | ETCS 202  | Software Engineering   |                 | 2               | , ]                                   |                   | -             |
| S   ETEC 210   Digital Electronics   3   1   - 4   |   | _  |   | ETEC 233   | Analog Electronics   | 3   | 1     | -  | 4   |              | 2                               | _        |   |  | _               | _               | -                                     | -                 | _             |
| S   C   ETCS 210   Paradiation of Computer Systems   3   1   4   4   5   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   5   ETCS 210   Apartaging Systems   3   1   4   4   5   ETCS 210   Apartaging Systems   3   1   4   4   4   5   ETCS 210   Apartaging Systems   3   1   4   4   4   5   ETCS 210   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   5   ETCS 220   Apartaging Systems   3   1   4   4   4   4   ETCS 220   Apartaging Systems   3   1   4   4   4   ETCS 220   Apartagi   |   | _  | _                                       | ETEC 210   | Digital Electronics  | 3   | 1     | -  | 4   |              |                                 | _        |   |  | _               | -               | -                                     | -                 | _             |
| S   C   ETCS 21   Operating Systems   3   1   4  |   | _  | +                                       | ETCS 219   | Foundation of Computer Systems   | 3   | 1     | -  | _   |              |                                 | _        |   | - Garant Cyclenia  | _               | _               | -                                     | -                 | _             |
| S   S   F   F   F   F   F   F   F   F  | B                                       | _  | +-+                                     |  |  | 3   | 1     | -  | 4   |              |                                 | _        |   | - St. C. Figoritani  |                 | _               | _                                     | -                 | _             |
| S   S   F   F   F   F   F   F   F   F  | ece                                     | _  | _                                       |  | Data Structures  | _   | _     | -  | _   |              |                                 | _        |   |  | _               | _               | -                                     | -                 | _             |
| 8 SE FEEC 256 Digital Electronics Lab  | 2                                       | _  | -                                       |  |  | -   | -     | 2  | 1   |              |                                 | _        |   | - Sement   | -               | 5               | _                                     | -                 |               |
| 9   CC   ETCS 255   Data Description   1   2   2   1   1   2   2   1   1   2   2   |   | _  | _                                       |  | Digital Electronics Lab  |   | -     | -  | 1   |              |                                 | _        |   |  | -               | -               | _                                     | _                 | _             |
| 1   C   ETCS-237   Dist Structures Iab   |   | _  |   |  |  | -   | -     | 2  | 1   |              |                                 | _        |   | gg.zac   | -               | _               | _                                     | _                 | _             |
| Total  | ŀ                                       | 10   | CC                                      | ETCS 257   |  | -   | -     | 2  | 1   |              |                                 |          | -10000  | Baddose Management Systems Lab   | -               | +               | +                                     | 2                 | 1             |
| 1   CC   ETCS 323   Java Programming   3   1   0   4   4   | _                                       |  |   |  | TOTAL  | 18  | 6     | 8  | 28  |              |                                 |          |   | TOTAL  | -               | -               | +                                     | _                 | -             |
| CC   ETCS 322   Java Programming   | -4-                                     | n  |   |  |  |   |       |  |   |              |                                 |          |   |  | 11              | 8               | 5                                     | 6                 | 26            |
| CC   ETCS 312   Java Programming   | ote.                                    | . I I a  | actical                                 | training will t  | be of four weeks duration at the end of fourth se  | mester  | du    | ring   | sumr  | ner break ar | d the e                         | valu     | ation will be o   | done at the end of fifth semester.   |                 | _               | _                                     | _                 | _             |
| 1   CC   | Т                                       |  | _                                       |  |  |   |       |  |   |              |                                 |          |   |  |                 | _               | _                                     | _                 | $\dashv$      |
| 2   CC   ETCS 210   Computer Graphics   3   1   4   4   4   6   ETCS 214   Theory of Computation   3   1   4   4   5   CC   ETCS 216   Theory of Computation   3   1   4   4   5   CC   ETCS 216   Theory of Computation   3   1   4   5   CC   ETCS 216   Theory of Computation   3   1   4   5   CC   ETCS 216   Theory of Computation   3   1   4   5   CC   ETCS 216   Theory of Computation   3   1   4   5   CC   ETCS 217   Theory of Computation   3   1   4   5   CC   ETCS 218   T   | 1                                       | -  | _                                       |  |  | _   | 1     | -  | 4   |              | 1                               | CC       | ETCS412   | Compiler Design  | 1 2             | 1               | 1                                     | $\neg$            | _             |
| SE   ETCS 214   Theory of Computation  | 1                                       | _  | _                                       |  |  |   | 1     | -  | 4   |              | 2                               | CC       | ETCS312   |  | _               | _               | +                                     | _                 | _             |
| CC   ETCS311   Meroprocessor Systems   3   1   4   4   CC   ETCS315   Meroprocessor Systems   3   1   4   4   CC   ETCS316   Meroprocessor Systems   4   CC   ETCS316    | ŀ                                       | _  | -                                       |  |  |   | 1     | -  |   |              | 3                               | CC       | ETCS314   |  | _               | _               | +                                     | _                 |               |
| CC   ETCS315   Fundamentals of iOS Development   1   1   1   1   1   1   1   1   1   | 1                                       |  | _                                       |  |  |   | 1     | -  | 4   |              | 4                               | CC       | ETCS324   |  |                 | _               | +                                     | _                 | _             |
| CC   ETCS361   Java Programming Lab  | _                                       |  | _                                       |  |  | _   | 1     | -  | 4   |              | 5                               | CC       | ETCS222   |  |                 | _               | +                                     | _                 | _             |
| S CC   ETCS365   Computer Networks Lab   -   2   1   9   Elective  | í ŀ                                     |  | _                                       |  |  | 1   | -     | _  | 1   |              | 6                               | CC       | ETCS454   |  | 3               | _               | _                                     | _                 | $\overline{}$ |
| CC   ETCS365   Fundamentals of IGG development Lab   -   -   2   1   | - 1                                     | _  |   |  |  | -   | -     | $\overline{}$  | 1   |              | 7                               | CC       | ETCS366   |  | -               | +               | _                                     | _                 | •             |
| 10   CC   ETCS28   Computer Graphics Lab   | 1                                       | -  |   |  |  | 1.  | -     | -  | 1   |              | 8                               | CC       | ETCS374   |  | -               | +               | _                                     | _                 | _             |
| 11   SE   FTEC335   Microprocessor Systems Lab   | T                                       | _  |   |  |  | 1.  | -     | _  | 1   |              | 9                               |          |   |  |                 | _               | 1-                                    | -1                | -             |
| Practical Training I   |   | 11   |   |  |  | +   | -     | _  | _   |              | (i)                             | CC       | ETCS318   | Principles of Programming Languages  | 3               | Ti              | Τ.                                    |                   | 1             |
| TOTAL  |   | 12   |   |  |  | _   | -     | _  | _   |              |                                 | _        | ETCS320   | Distributed Computing Systems  | _               | _               | 1.                                    | _                 | _             |
| Control   Cont   |   |  |   |  |  | _   | -     | -  | _   |              | (iii)                           | SE       | ETCS322   | E-Commerce and ERP   | _               | -               | 1.                                    | _                 |               |
| 1   CC   ETCS40  Artificial Intelligence   3   1   - 4   |   |  |   |  |  |   |       |  |   |              |                                 |          |   |  | _               | _               | _                                     | _                 |               |
| CC   ETCS401   Artificial Intelligence   |   | Prac   | ctical t                                | raining will be  | of six weeks duration at the end of sixth semes  | ter du  | ina   | cum  | man   | hmaal: 1 41  | -                               |          |   |  |                 |                 |                                       |                   | ٦             |
| CC   ETCS316   WebTechnologies   3   1   4   | te:                                     |  |   |  |  |   | 8     | Juin   | III CI  | oreak and th | e evalu                         |          | n will be done  | at the end of seventh semester.  |                 |                 |                                       |                   |               |
| S   ETIMO42  Entrepreneurship Development   3   1   4   4  | _                                       |  |   |  |  |   |       |  |   |              |                                 | ation    | De done   |  |                 |                 |                                       |                   |               |
| SE ETMC421   Entrepreneurship Development  | L                                       | 1  | CC                                      | ETCS401 A  | artificial Intelligence  |   | 1     | _  | _   | $\neg$       |                                 | _        |   |  |                 | _               | _                                     | _                 |               |
| CC   ETCS368   Web Technologies Lab  | E                                       | 2  | CC CC                                   | ETCS401 A<br>ETCS316 W   | Artificial Intelligence WebTechnologies  | 3   | 1     | -  | 4   |              | 1 (                             | cc       | ETCS414   | Neural Network   | 3               | 1               |                                       | 14                | 4             |
| S   CC   ETCS451   Artificial Intelligence Lab   |   | 1 2 3  | CC CC SE 1                              | ETCS401 A<br>ETCS316 W<br>ETMC421 E  | Artificial Intelligence WebTechnologies Intrepreneurship Development   | 3   | 1     | -  | 4 4   |              | 1 (                             | cc       | ETCS414   | Neural Network<br>Major Project  | 3               | 1 -             | -                                     | 4                 | 4             |
| SE   ETCS462   Minor Project   |   | 1<br>2<br>3<br>4   | CC CC SE 1                              | ETCS401 A<br>ETCS316 W<br>ETMC421 E<br>ETCS368 W   | Artificial Intelligence WebTechnologies Intrepreneurship Development Web Technologies Lab  | 3 3 3   | 1 1 - | -  | 4 4 3   | -            | 1 (                             | cc       | ETCS414<br>ETCS464  | Neural Network  Major Project  Open Elective (without Lab)   | -               | 1               | <br> -                                | 6                 | 4             |
| Practical Training II  |   | 1<br>2<br>3<br>4<br>5  | CC SE 1                                 | ETCS401 A<br>ETCS316 W<br>ETMC421 E<br>ETCS368 W<br>ETCS451 A  | Artificial Intelligence VebTechnologies Interpreneurship Development Veb Technologies Lab Trificial Intelligence Lab   | 3 3 3   | 1 1   | 2  | 4 4 3 1   | 1            | 1 (                             | cc       | ETCS414<br>ETCS464  | Neural Network  Major Project  Open Elective (without Lab)   | -               | 1 -             | -<br> -<br> -                         |                   |               |
| (i) ETCS403 Distributed Algorithms (ii) ETCS421 Storage Systems (iii) ETCS423 Robotics (iv) ETCS423 Robotics (iv) ETCS424 Advanced Computer Architecture (iv) ETCS425 Graph Theory (iv) ETCS422 Cloud Computing (iv) ETCS422 Cloud Computing (iv) ETCS425 Machine Learning Lab (iv) ETCS425 Machine Learning Lab (iv) ETCS427 Mobile and Wireless Communication (iv) ETCS427 Mobile and Wireless Communication Lab (iv) ETCS428 Natural Language Processing Lab (iv) ETCS429 Advanced Computer Networks (iv) ETCS45 Digital Image Processing Lab (iv) ETCS45 Natural Language Proc |   | 1<br>2<br>3<br>4<br>5<br>6   | CC SE I                                 | ETCS401 A<br>ETCS316 W<br>ETMC421 E<br>ETCS368 W<br>ETCS451 A<br>ETCS462 M   | Artificial Intelligence VebTechnologies Intrepreneurship Development Veb Technologies Lab Trificial Intelligence Lab Intelligence Lab  | 3 3 3   | 1 1   | 2 2  | 4 3 1 1   | 1            | 1 (                             | cc       | ETCS414<br>ETCS464  | Neural Network  Major Project  Open Elective (without Lab)   | -               | 1 -             | -<br> -                               |                   |               |
| (ii)         ETCS421         Storage Systems         3 1 - 4           (iii)         ETCS423         Robotics         3 1 - 4           (iv)         ETCS415         Advanced Computer Architecture         3 1 - 4           (v)         ETCS420         Graph Theory         3 1 - 4           (vi)         ETCS422         Cloud Computing         3 1 - 4           9         Elective (with Lab)         ETCS455         Digital Image Processing Lab         3 1 - 4           (ii)         ETCS422         Cloud Computing         3 1 - 4         ETCS459         Advanced Computer Networks         3 1 - 4           (iii)         ETCS425         Machine Learning Lab         2 1         (iii)         ETCS488         Natural Language Processing Lab         2 1           (iii)         ETCS471         Machine Learning Lab         2 1         (iii)         ETCS488         Natural Language Processing Lab         2 1           (iii)         ETCS473         Mobile and Wireless Communication Lab         2 1         (iv)         ETCS430         Advanced Database Management Systems Lab         2 1           (iii)         ETCS306         Data Warehousing and Data Mining         3 1 - 4         ETCS450         Advanced Database Management Systems Lab         2 1   |   | 1<br>2<br>3<br>4<br>5<br>6<br>7  | CC SE I                                 | ETCS401 A<br>ETCS316 W<br>ETMC421 E<br>ETCS368 W<br>ETCS451 A<br>ETCS462 M   | retificial Intelligence VebTechnologies Interpreneurship Development Veb Technologies Lab Trifficial Intelligence Lab Interpreneurship Interpretation of the Interpretation of t | 3 3 3   | 1 1   | 2 2 -  | 4<br>4<br>3<br>1<br>1<br>2                              |              | 1 (                             | cc       | ETCS414<br>ETCS464  | Neural Network  Major Project  Open Elective (without Lab)   | -               | 1 -             | -<br> -                               |                   |               |
| Ciii   |   | 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8   | CC   SE   CC   SE   SE   SE   SE   SE   | ETCS401 A<br>ETCS316 W<br>ETMC421 E<br>ETCS368 W<br>ETCS451 A<br>ETCS462 M<br>ETCS481 Pr   | Artificial Intelligence VebTechnologies Interpreneurship Development Veb Technologies Lab Trifficial Intelligence Lab Itinor Project Tractical Training II  Elective (without Lab)   | 3 3 3   | 1 1   | 2 2 -  | 4<br>4<br>3<br>1<br>1<br>2                              |              | 1 (                             | cc       | ETCS414<br>ETCS464  | Neural Network  Major Project  Open Elective (without Lab)   | -               | -               | -<br>  -                              |                   |               |
| City   ETCS423   Robotics   3   1   - 4  | (i                                      | 1 2 3 4 6 5 6 5 7 5 8 i)   | CC CC CC SE I                           | ETCS401 A ETCS316 W ETMC421 E ETCS368 W ETCS451 A ETCS462 M ETCS481 Pr   | Artificial Intelligence  VebTechnologies  Interpreneurship Development  Veb Technologies Lab  Trificial Intelligence Lab  Interpreneurship Intelligence Lab  | 3 3 3   | 1 1   | 2 2 -  | 4<br>4<br>3<br>1<br>1<br>2                              |              | 1 (                             | cc       | ETCS414<br>ETCS464  | Neural Network  Major Project  Open Elective (without Lab)   | -               | 1 -             | -                                     |                   |               |
| Civ   ETCS415   Advanced Computer Architecture   3   1   - 4   | (i                                      | 1 2 3 4 6 5 6 5 7 5 8 i) ii)   | CC CC SE I                              | ETCS401 A ETCS316 W ETMC421 E ETCS368 W ETCS451 A ETCS462 M ETCS462 M ETCS403 Di ETCS403 Di ETCS421 Ste  | Artificial Intelligence WebTechnologies Intrepreneurship Development Web Technologies Lab Trificial Intelligence Lab Ilinor Project Tractical Training II Elective (without Lab) Elective Algorithms Torage Systems  | 3 3 3 3   | 1 1   | 2 2 - :  | 4 4 3 1 1 2 2 2   |              | 1 (2 (3 3                       | cc       | ETCS414<br>ETCS464  | Neural Network  Major Project  Open Elective (without Lab)  (As specified by other schools)  | -               | -               | -<br> -                               |                   |               |
| Column   FTCS420   Graph Theory   3   1   - 4  | (ii)                                    | 1 2 3 4 6 5 6 5 7 5 8 ii) iii) iii)  | CC CC SE I                              | ETCS401 A ETCS316 W ETMC421 E ETCS368 W ETCS451 A ETCS462 M ETCS481 Pr ETCS403 Di ETCS421 St ETCS423 Rc  | Artificial Intelligence VebTechnologies Intrepreneurship Development Veb Technologies Lab Trificial Intelligence Lab Interpreneurship II  Elective (without Lab) Elective Systems Debotics   | 3 3 3 3 3 3                                     | 1 1   | 2 2 - :  | 4<br>4<br>3<br>1<br>1<br>2<br>2                         |              | 1 (2 (3 3 3 4 4 4               | CC<br>CC | ETCS414<br>ETCS464  | Neural Network  Major Project  Open Elective (without Lab)  (As specified by other schools)  Elective (with Lab)   | 4               |                 | -   -   -   -   -   -   -   -   -   - |                   |               |
| Cloud Computing   3   1   - 4  | (i) (iv (iv)                            | 1 2 3 3 4 4 (1 5 5 (1 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | CC CC SE I                              | ETCS401 A ETCS316 W ETMC421 E ETCS368 W ETCS451 A ETCS462 M ETCS462 M ETCS481 Pr ETCS403 Di ETCS421 Sb ETCS423 Rc ETCS423 Rc ETCS415 Ac  | Artificial Intelligence VebTechnologies Intrepreneurship Development Veb Technologies Lab Trificial Intelligence Lab Interpreneurship Intelligence Lab Interpreneurship II  Elective (without Lab) Intelligence Lab Interpreter Intelligence Lab Int | 3 3 3   | 1     | - 22 22  | 4<br>3<br>1<br>1<br>2<br>2                              |              | 1 (2 (3 3 3 4 4 4               | CC       | ETCS414 ETCS464 ETCS465   | Neural Network  Major Project  Open Elective (without Lab)  (As specified by other schools)  Elective (with Lab)  Digital Image Processing   | 4               |                 |                                       | 4                 | 4             |
| First   Firs   | { (ii (iii (iv (v                       | 1 2 3 4 6 5 6 5 6 5 7 5 8 8 ii) iii) iii) vy)  | CC CC SE I                              | ETCS401 A ETCS316 W ETCS316 W ETCS368 W ETCS451 A ETCS462 M ETCS481 Pr ETCS403 Di ETCS421 Sb ETCS421 Rc ETCS423 Rc ETCS420 Gr  | Artificial Intelligence VebTechnologies Interpreneurship Development Veb Technologies Lab Irtificial Intelligence Lab Interpreneurship Development Intelligence Lab Intelligence | 3 3   | 1     | - 2<br>2<br>2<br>2<br>- :  | 4<br>4<br>3<br>1<br>1<br>1<br>1<br>2<br>2<br>2<br>2     |              | 1 (1 2 (1 3 3 4 (i) 4 (i) 4 (i) | OC OC    | ETCS414 ETCS464  ETCS465  ETCS405  ETCS405  ETCS405  ETCS455  | Neural Network  Major Project  Open Elective (without Lab)  (As specified by other schools)  Elective (with Lab)  Digital Image Processing  Digital Image Processing Lab   | 3 -             | 1               | - 2                                   | 4 1               | 4             |
| FTCS47   | (ii) (iv) (vi) (vi)                     | 1 2 3 4 4 5 5 6 6 5 7 5 8 8 1 ii) 1 iii) 1 iiii) 1 iiii) 1 iiii | CC CC SE I                              | ETCS401 A ETCS316 W ETCS316 W ETCS368 W ETCS451 A ETCS462 M ETCS481 Pr ETCS403 Di ETCS421 Sb ETCS421 Rc ETCS423 Rc ETCS420 Gr  | Artificial Intelligence VebTechnologies Interpreneurship Development Veb Technologies Lab Irtificial Intelligence Lab Interpreneurship Development Interpretation of the Interpr | 3 3 3 3 3 3 3 3 3 3 3                           | 1     | - 2<br>2<br>2<br>2<br>   | 4 4 3 3 1 1 1 2 2 2 2 3                                 |              | 1 (1 2 (1 3 3 4 (i) 4 (i) 4 (i) | oc oc    | ETCS414<br>ETCS464<br>ETCS465<br>ETCS405 I<br>ETCS455 I<br>ETCS413 /  | Neural Network  Major Project  Open Elective (without Lab)  (As specified by other schools)  Elective (with Lab)  Digital Image Processing Digital Image Processing Lab  Advanced Computer Networks  | 3 -             | 1               | - 2 -                                 | 4 1 4             | 4             |
| (ii) ETCS427 Mobile and Wireless Communication 3 1 - 4   | (ii) (iv) (vi) (vi)                     | 1 2 3 4 4 5 5 6 6 5 7 5 8 8 1 ii) 1 iii) 1 iiii) 1 iiii) 1 iiii | CC CC SE I                              | ETCS401 A ETCS316 W ETMC421 E ETCS368 W ETCS451 A ETCS462 M ETCS481 Pr ETCS403 Di ETCS421 Sb ETCS421 R ETCS423 R ETCS423 R ETCS420 G ETCS422 Cle   | Artificial Intelligence  VebTechnologies  Interpreneurship Development  Veb Technologies Lab  Irtificial Intelligence Lab  Itinor Project  Itactical Training II  Elective (without Lab)   | 3 3 3 3 3 3 3 3 3 3 3                           | 1     | - 2<br>2<br>2<br>2<br>   | 4 4 3 3 1 1 1 2 2 2 2 3                                 |              | 1 (1 2 (3 3 3 4 (i) (ii) (iii)  | cc       | ETCS414 ETCS464  ETCS465  ETCS405 ETCS455 ETCS413 ETCS459 A   | Neural Network  Major Project  Open Elective (without Lab)  (As specified by other schools)  Elective (with Lab)  Digital Image Processing Digital Image Processing Lab  Advanced Computer Networks  Advanced Computer Networks Lab  | 3 - 3           | 1 - 1 -         | 2 - 2                                 | 4 1 4 1           | 4             |
| (ii) ETCS427 Mobile and Wireless Communication 3 1 - 4  ETCS473 Mobile and Wireless Communication Lab 2 1  (iii) ETCS362 Data Warehousing and Data Mining Lab 2 1  TOTAL 15 4 6 26   | { (ii) (iii) (iv) (v) (vi) 9            | 1 2 3 4 ( ) 5 ( ) 6 5 ( ) 6 6 ( ) 7 ( ) 8 8 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )  | CC CC SE I                              | ETCS401 A ETCS316 W ETMC421 E ETCS368 W ETCS451 A ETCS462 M ETCS462 M ETCS403 Di ETCS421 Sh ETCS423 R ETCS423 R ETCS423 R ETCS423 R ETCS424 G ETCS422 Ch ETCS425 M ETCS425 M ETCS425 M ETCS425 M ETCS425 M   | Artificial Intelligence  WebTechnologies Interpreneurship Development  Web Technologies Lab  rittificial Intelligence Lab  Itinor Project Tractical Training II  Elective (without Lab)  Instributed Algorithms  orage Systems  Subotics  dvanced Computer Architecture  Taph Theory  oud Computing  Elective (with Lab)  achine Learning  | 3 3 3 3 3 3 3 3 3 3 3 1 3 1 3 1                 | 1     | - 2<br>2<br>2<br>2<br>   | 4 4 3 3 1 1 1 2 2 2 2 3                                 |              | 1 (1 2 (3 3 3 4 (i) (ii) (iii)  | CCC      | ETCS414 ETCS464  ETCS405 ETCS405 IETCS455 IETCS459 ETCS459 ETCS428 N  | Neural Network  Major Project  Open Elective (without Lab)  (As specified by other schools)  Elective (with Lab)  Digital Image Processing Digital Image Processing Lab Advanced Computer Networks Advanced Computer Networks Lab  Natural Language Processing   | 3 - 3           | 1 - 1 -         | 2 - 2 -                               | 4 1 4 1 1         | 4             |
| ETCS473   Mobile and Wireless Communication Lab   2   1  | { (ii) (iii) (iv) (v) (vi) 9            | 1 2 3 4 ( ) 5 ( ) 6 5 ( ) 6 6 ( ) 7 ( ) 8 8 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )  | CC CC CC CC CC CC III II II II II II II | ETCS401 A ETCS316 W ETMC421 E ETCS368 W ETCS451 A ETCS462 M ETCS462 M ETCS421 Pr ETCS421 Ste ETCS423 Rc ETCS424 G ETCS424 G ETCS425 M ETCS425 M ETCS427 M ET | Artificial Intelligence  WebTechnologies Intrepreneurship Development  Web Technologies Lab  rtificial Intelligence Lab  Itinor Project Iractical Training II  Elective (without Lab)  istributed Algorithms  orage Systems  subotics  dvanced Computer Architecture  raph Theory  oud Computing  Elective (with Lab)  achine Learning  achine Learning Lab  | 3 3 3 3 3 3 3 3 3 3 3 1 3 1 3 1                 | 1     | -  | 4 4 3 3 1 1 1 2 2 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4   |              | 4 (i) (iii)                     | CCC      | ETCS414<br>ETCS464<br>ETCS465 I<br>ETCS455 I<br>ETCS455 I<br>ETCS413 A<br>ETCS459 A<br>ETCS458 N              | Neural Network  Major Project  Open Elective (without Lab)  (As specified by other schools)  Elective (with Lab)  Digital Image Processing Digital Image Processing Lab  Advanced Computer Networks Lab  Natural Language Processing Natural Language Processing Lab   | 3 - 3 - 3 -     | 1 - 1 -         | 2 - 2 -                               | 4 1 4 1 4 4       | 4             |
| (iii) ETCS306 Data Warehousing and Data Mining 3 1 1 - 4  ETCS362 Data Warehousing and Data Mining Lab 2 1  TOTAL 15 4 6 26  TOTAL   | (ii) (iv) (vi) (vi) (vi) (vi) (vi) (vi) | 1 2 3 4 6 5 6 5 6 6 5 6 6 5 6 6 5 6 6 6 5 6  | CC CC SE I                              | ETCS401 A ETCS316 W ETMC421 E ETCS368 W ETCS451 A ETCS462 M ETCS463 D ETCS403 D ETCS403 D ETCS421 S ETCS422 G ETCS424 G ETCS425 A ETCS425 M ETCS425 M ETCS427 M ETCS42 | Artificial Intelligence  VebTechnologies  Interpreneurship Development  Veb Technologies Lab  Irrificial Intelligence Lab  Ilinor Project  Factical Training II  Elective (without Lab)  Intelligence Lab  Intelli | 3 3 3 3 3 3 3 3 1 3 1 3 1 1                     | 1 1   | - 2<br>2<br>2<br>2<br>- 2<br>- 4<br>- 4<br>- 4<br>- 4                          | 4 4 3 3 1 1 1 2 2 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4   |              | 4 (i) (iii)                     | CCC      | ETCS414<br>ETCS464<br>ETCS465 I<br>ETCS405 I<br>ETCS455 I<br>ETCS413 /<br>ETCS459 A<br>ETCS458 N<br>ETCS430 A | Neural Network  Major Project  Open Elective (without Lab)  (As specified by other schools)  Elective (with Lab)  Digital Image Processing Digital Image Processing Lab  Advanced Computer Networks Lab Natural Language Processing Lab  Advanced Database Management Systems  | 3 - 3 - 3 -     | 1 - 1 - 1       | 2 - 2 - 2 2                           | 4 1 1 4 4 1 1     | 4             |
| ETCS362   Data Warehousing and Data Mining Lab   | (ii) (iv) (vi) (vi) (vi) (vi) (vi) (vi) | 1 2 3 4 6 5 6 5 6 6 5 6 6 5 6 6 5 6 6 6 5 6  | CC CC SE I                              | ETCS401 A ETCS316 W ETMC421 E ETCS368 W ETCS462 M ETCS462 M ETCS403 Di ETCS421 St ETCS421 St ETCS421 St ETCS423 Rc ETCS421 St ETCS421 M ETCS423 M ETCS423 M ETCS427 M ETCS427 M ETCS423 M ETC | Artificial Intelligence  VebTechnologies  Interpreneurship Development  Veb Technologies Lab  Irrificial Intelligence Lab  Ilinor Project  Irractical Training II  Elective (without Lab)  Instributed Algorithms  Intelligence Lab  | 3 3 3 3 3 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3         | 1 1   | - 2<br>2<br>2<br>2<br>2<br>- 4<br>- 4<br>- 4<br>- 4<br>1<br>1<br>4             | 4 4 3 3 1 1 1 2 2 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4   |              | 4 (i) (iii)                     | CCC      | ETCS414<br>ETCS464<br>ETCS465 I<br>ETCS405 I<br>ETCS455 I<br>ETCS413 /<br>ETCS459 A<br>ETCS458 N<br>ETCS430 A | Neural Network  Major Project  Open Elective (without Lab)  (As specified by other schools)  Elective (with Lab)  Digital Image Processing Digital Image Processing Lab  Advanced Computer Networks Lab Natural Language Processing Lab  Advanced Database Management Systems  | 3 - 3 - 3 - 3   | 1 - 1 - 1       | 2 - 2 - 2 2                           | 4 1 4 1 4 1 4 4   | 4             |
| TOTAL 15 4 6 26 TOTAL 0 2 2 2 10   | (i) (ii) (iii) (iii)                    | 1 2 3 3 4 4 6 5 6 6 5 6 6 5 6 6 6 6 6 6 6 6 6 6  | CC CC SE I                              | ETCS401 A ETCS316 W ETMC421 E ETCS368 W ETCS451 A ETCS462 M ETCS462 M ETCS413 Di ETCS421 Sb ETCS421 R ETCS423 R ETCS424 R ETCS424 R ETCS427 A ETCS427 M ETCS | Artificial Intelligence  VebTechnologies Interpreneurship Development  Veb Technologies Lab Irrificial Intelligence Lab Itinor Project Irractical Training II  Elective (without Lab) Intelligence Lab Itinor Project Irractical Training II  Elective (without Lab) Intelligence Lab Itinor Project Irractical Training II  Elective (without Lab) Intelligence Lab Intell | 3 3 3 3 3 3 1 3 1 3 1 1 3 1 1                   | 1     | - 2<br>2<br>2<br>2<br>- 4<br>- 4<br>- 4<br>- 4<br>1<br>1                       | 4 4 4 3 1 1 1 1 2 2 2 2 2 2 2 2 2 3 4 4 4 4 4 4 4 4 4 4 |              | 4 (i) (iii)                     | CCC      | ETCS414<br>ETCS464<br>ETCS465<br>ETCS405 I<br>ETCS455 I<br>ETCS413 /<br>ETCS459 A<br>ETCS458 N<br>ETCS430 A   | Neural Network  Major Project  Open Elective (without Lab)  (As specified by other schools)  Elective (with Lab)  Digital Image Processing Digital Image Processing Lab  Advanced Computer Networks Lab Natural Language Processing Lab  Advanced Database Management Systems  | 3 - 3 - 3 - 3   | 1 - 1 - 1       | 2 - 2 - 2 2                           | 4 1 4 1 4 1 4 4   | 4             |
| 101AL 0 2 2 40   | (i) (ii) (iii) (iii)                    | 1 2 3 3 4 4 6 5 6 6 5 6 6 5 6 6 6 6 6 6 6 6 6 6  | CC CC SE I                              | ETCS401 A ETCS316 W ETMC421 E ETCS368 W ETCS451 A ETCS462 M ETCS462 M ETCS413 Di ETCS421 Sb ETCS421 R ETCS423 R ETCS424 R ETCS424 R ETCS427 A ETCS427 M ETCS | Artificial Intelligence  VebTechnologies Interpreneurship Development  Veb Technologies Lab Intelligence Lab Intelligence Lab Interpreter Intelligence Lab Inte | 3 3 3 3 3 3 1 3 1 3 1 1 3 1 1                   | 1 1   | - 2<br>2<br>2<br>2<br>- 4<br>- 4<br>- 4<br>- 4<br>1<br>1<br>4                  | 4 4 4 3 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 4 4 4 4 4 4 4 4 |              | 4 (i) (iii)                     | CCC      | ETCS414<br>ETCS464<br>ETCS465<br>ETCS405 I<br>ETCS455 I<br>ETCS413 /<br>ETCS459 A<br>ETCS458 N<br>ETCS430 A   | Neural Network  Major Project  Open Elective (without Lab)  (As specified by other schools)  Elective (with Lab)  Digital Image Processing Digital Image Processing Lab  Advanced Computer Networks Lab Natural Language Processing Lab  Advanced Database Management Systems  | 3 - 3 - 3 - 3   | 1 - 1 - 1       | 2 - 2 - 2 2                           | 4 1 4 1 4 1 4 4   | 4             |
|  | (ii) (iii) (iii) (iii)                  | 1 2 3 3 4 4 6 5 6 6 5 6 6 5 6 6 6 6 6 6 6 6 6 6  | CC CC SE I                              | ETCS401 A ETCS316 W ETMC421 E ETCS368 W ETCS451 A ETCS462 M ETCS462 M ETCS413 Di ETCS421 Sb ETCS421 R ETCS423 R ETCS424 R ETCS424 R ETCS427 A ETCS427 M ETCS | Artificial Intelligence  VebTechnologies Interpreneurship Development  Veb Technologies Lab Intelligence Lab Intelligence Lab Interpreter Intelligence Lab Inte | 3 3 3 3 3 3 3 1 3 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 | 1 1   | - 2<br>2<br>2<br>2<br>2<br>2<br>- 4<br>- 4<br>- 4<br>- 4<br>- 4<br>1<br>1<br>1 | 4 4 3 3 1 1 1 2 2 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4   |              | 4 (i) (iii)                     | CCC      | ETCS414<br>ETCS464<br>ETCS465<br>ETCS405 I<br>ETCS455 I<br>ETCS413 /<br>ETCS459 A<br>ETCS458 N<br>ETCS430 A   | Neural Network  Major Project  Open Elective (without Lab)  (As specified by other schools)  Elective (with Lab)  Digital Image Processing Digital Image Processing Lab Advanced Computer Networks Advanced Computer Networks Lab  Vatural Language Processing Lab Advanced Database Management Systems Advanced Database Management Systems Lab | 3 - 3 - 3 - 3 3 | 1 - 1 - 1 - 1 1 | 2 - 2 - 2 - 2                         | 4 1 1 4 1 1 4 1 1 | 4             |

|  | Note   Control File  | March   Court   Cour | Monte   Mont | -   | _     | CSE)<br>MESTE | R                  |  |                            |                            | J19-2                      | v23 (30                      | meme of                        | T                              | _                                    | _                                       | oice-Based Cree         | ait System)  |                                |                              | _                            | so               |
|--|--|--|--|-----|-------|---------------|--------------------|--|----------------------------|----------------------------|----------------------------|------------------------------|--------------------------------|--------------------------------|--------------------------------------|---|-------------------------|--|--------------------------------|------------------------------|------------------------------|------------------|
| SI   | MAISSA   Mayel Melementes  |  | Modelson Agricultural Propries   | -   | _     |               |                    | le Course Title  | I                          |                            | Т                          | P                            | T C                            | +                              | _                                    | _                                       |                         | ode Course Title   | 1.                             | - Ton                        | _                            | _                |
| Simple   Employ   E   | Marie   Mari |  | Miles  |     |       | _             |                    |  | _                          | _                          | _                          | 1                            | _                              | +                              | 1                                    |   |                         |  | L                              | T                            | -                            | P                |
| STATE   Stat   | Ministry   Ministry  |  | California   Cal |     | 5     |               |                    |  | -                          |                            | 1                          | -                            | -                              | +                              | 1                                    | _                                       |                         |  | -                              | -                            | 4                            | -                |
| C  | SEIDAD   Openstrough for Problems Softing   1   1   0   4   0   0   0   0   0   0   0   0  |  | Minimum   Problem Solve   1  |     | 2     | _             |                    |  | -                          |                            | 1                          | -                            | _                              | -                              | 2                                    | _                                       |                         |  | ig 3                           | 1                            | 1                            | -                |
| Signature   Part   Pa   | MEDIPAL   Dissisted Mechanical Engineering   1   | March   Marc | Ministry   Ministry  |     | P.    | _             |                    |  | -                          | -                          | -                          | -                            | -                              | 1                              | 3                                    | _                                       | ETCS1                   | 2A Object Oriented Programming   | 3                              | 1                            |                              | -                |
| ST   Compare Compared Physical Lab   | Part    |  | Part   |     | 4     | _             |                    |  | ng 3                       |                            | 1                          | -                            | 4                              |                                | 4                                    | SE                                      | ETEL10                  | 1A Communication Skills  | 4                              | -                            | 7                            | -                |
| Signature   Paper   Laborate   Signature   Paper   Laborate   Signature   Paper   Laborate   Signature   Signatu   | ## PRINCIPAL   Proposering Physics Lab   |  | Properties   Pro |     | 5     | SE            | ETME101            | A Basics of Mechanical Engineering   | ng 3                       |                            | -                          | -                            | 4                              |                                | 5                                    | OE                                      |                         | Open Elective-II   | 4                              | -                            | 1                            | _                |
| Part   | Proposed   Proposed Lab  | B  | PRESIDENT   Projecting Project Lab   |     | 6     | OE            |                    | Open Elective-I  | 4                          |                            | -                          | -                            | 4                              | 1                              | 6                                    | SE                                      | ETME 1                  | 55A Engineering Graphics Lab   | -                              | 1.                           | 1                            | 3                |
| SI   | ## BISSA   Programming for Problems Solving   1  |  | Mail State of Mechanical Engineering Later   1   |     | 17    | SE            | ETPH100            | A Engineering Physics Leb  |                            |                            |                            |                              |                                | 1                              |                                      |   |                         | Paging of Electrical & Electronic English  | +                              | +                            | +                            |                  |
| ETMINISTAN   | Management   Man | ETMEDIA   Pregraming for Problems Solving  | Miles   Mile |     | -     | -             | EIFHIO             |  | -                          | -                          | _                          | 2                            | 1                              | 1                              | 7                                    | SE                                      | ETEC15                  |  | - E                            | -                            | -                            | 2                |
|  | Lab  |  | Lab  |     | 8     | SE            | ETME151            | A  | _                          | 1                          | -                          | 2                            | 1                              |                                | 8                                    | cc                                      | ETCS 16                 | 66A Object Oriented Programming Lab  | -                              | -                            | 2                            | 2                |
|  | 1  | TOTAL  | 1  |     | 9     | cc            | ETCS153            |  | ng .                       | -                          | -                          | 2                            | 1                              |                                | 9                                    | SE                                      | ETEL 17                 | 1A Communication Skills Lab  | -                              |                              | 2                            | 2                |
| SE   | No.   Computer Computation   S   1   | SE   | A Symbol Mathematical  |     | H     |               |                    |  |                            | 1                          |                            |                              |                                |                                | 10                                   | SE                                      | ETME 1:                 | 57A Workshop Practices   | ·                              | Ŀ                            | 3                            | 3                |
| SE   ETMA 201A   Applied Mothematics-III   3   1   4   4   5   5   5   5   5   5   5   5   | Applied Methomenics  | 1   SE   ETAX 201A   Applied Multimentaria-III   3   1   0   4   4   5   5   5   5   5   5   5   5   | A 2010   Applied Methomatics     3   1     4   |     | то    | TAL           |                    |  | 1                          | 9 3                        | 3                          | 9                            | 26                             |                                | TO                                   | TAL                                     |                         |  | 16                             | 3                            | 1                            | 12               |
| SE   | 23.24   Assoly Electronics   3   1   | SE   | 2319.   Analog Electronics   3   | 1   | 1     | SE            | ETMA 2014          | Applied Mathematica III  | 1.                         | Τ.                         |                            |                              |                                |                                | _                                    |   |                         |  | _                              | _                            | _                            |                  |
| SE   | 2210.   Digital Electronics   3  | SE   | 210.   Digital Electronics   1   1   - 4   4   5   5   5   5   5   5   5   5   |     | Ë     | -             | EIMA 2017          | Applied Mathematics-III  | 3                          | 1                          |                            | • 1                          | 4                              |                                | 1                                    | CC                                      | ETCS222                 | A Computer Organization & Architecture   | 3                              | 1                            | -                            |                  |
| SE   | 21/24   21/25   21/2 | Secondary   Seco | 23100   Popular Recentation   3  | 1   | 2     | SE            | ETEC 233A          | Analog Electronics   | 3                          | 1                          |                            |                              | 4                              |                                | 2                                    | SE                                      | ETMA 20                 | RA Numerical Applicate   | 1.                             | 1.                           | +                            |                  |
| SE   | 295.   Production of Computer Systems   3  |  | SETION   | 1   | 3     | SE            | ETEC 210A          | Digital Flectronics  | 2                          | 1                          |                            |                              |                                |                                | -                                    | -                                       |                         |  | 3                              | 1                            | -                            |                  |
| CC   | 227.4   Dua Siructures   | Secondary   Seco | Section   Sect | 1   | 1     |               |                    |  | -                          | 1                          |                            | -                            | 4                              |                                | 3                                    | SE                                      | ETEC202                 | A Signals and Systems  | 3                              | 1                            | -                            |                  |
| CC   | 17.10   Does Structures  | C  | 1317   Disc Structures   |     | -     |               |                    |  | _                          | 1                          |                            | -                            | 4                              |                                | 4                                    | CC                                      | ETCS220                 | Analysis and Design of Algorithm   | 3                              | 1                            | 1.                           |                  |
| SEC   SECS11A   Operating Systems   3   1  | 111  | S  | State   Computer Systems   3   1   -   4   |     | 5     |               |                    | Data Structures  | 3                          | 1                          |                            | -                            | 4                              |                                | 5                                    | CC                                      | ETCS307                 |  | 2                              | 1                            | +                            | -                |
| SE   | 250.6   Digital Electronics Lab  | SE   | 2-256A   | П   | 6     | CC            | ETCS211A           | Operating Systems  | 3                          | 1                          |                            |                              | 4                              |                                | 6                                    |   |                         |  | 2                              | +                            | +                            | -                |
| SE   | 256A   Digital Electronical Lab  | SE   | Part    | П   | 7     | SE            | ETEC 263A          | Analog Electronics Lab   |                            | 1.                         |                            | ,                            | 187.19                         |                                | 7                                    |   |                         |  | 3                              | -                            | 1-                           | 4                |
| CC   | 257.   Data Structures Lab   | CC   | 227.   Disa Structures Lab   | ı   |       |               |                    |  | -                          | 1                          | _                          | -                            | 1                              |                                | _                                    | CC                                      | ETCS260A                | Computer Organization & Architecture Lab   | -                              | -                            | 2                            |                  |
| CC   | MSOIA   Disaster Management   3  | December   Column   | Missing   Miss | ı   | 8     | SE            | ETEC 256A          | Digital Electronics Lab  | -                          | -                          |                            | 2                            | 1                              |                                | 8                                    | cc                                      | ETCS 355                | A Database Management Systems I al-  |                                | 1                            | -                            | -                |
| OR   ETDM301A   Disaster Management   3   -   -   3   1   -   4   1   1   1   1   1   1   1   1   1  | M301A   Disaster Management   3   -   -   3   1   6   6   30   | 10   DE  | MSOLA   Disaster Management   3  | 1   | 9     | CC            | ETCS257A           | Data Structures Lab  | 1                          | +                          |                            | ,                            | 1                              |                                | 0                                    |   |                         | - Carlo  | -                              | -                            | 12                           |                  |
| TOTAL  | 18   6   6   30  | TOTAL  | 18   6   6   30   10   10   10   10   10   10   10   | t   | 10    | _             |                    |  | -                          | +                          | - 1                        | -                            | _                              |                                | 9                                    | ICC                                     | ETCS262A                | Analysis and Design of Algorithm Lab   |                                |                              | 2                            | 1                |
| Total  | 18   5   6   | Protected training will be of minimum six weeks duration at the end of fourth semester during summer breaks and the evaluation will be done at the end of fifth semester.    CC  | Pe of minimum six weeks duration at the end of Fourth semester during summer break and the evaluation will be done at the end of fifth semester.   | ŀ   | _     | _             | ETDM301.           | A Disaster Management  | 3                          | -                          | -                          |                              | 3                              |                                |                                      |   |                         |  |                                |                              | $^{\dagger}$                 |                  |
| CC   | A computer Networks   A computer Networks  | President training will be of minimum ats wecks duration at the end of fourth semester during summer break and the cabusation will be done at the end of fifth semester.   | Description    | 1   | 10.   | AL            |                    |  | 18                         | 6                          | (                          | 5                            | 30                             |                                | TOT                                  | AL                                      |                         |  | 18                             | 5                            | 6                            |                  |
| CC   | 1  | C  | 214A   Theory of Computation   3   1   -   4     2   CC   ETCS412A   Compiler Design   3   1   -   2   2   1   3   CC   ETCS401A   Artificial Intelligence   3   1   -   2   2   2   3   3   -   2   2   3   3   3   -   2   3   3   3   -   2   3   3   3   -   2   3   3   3   -   2   3   3   3   -   2   3   3   3   -   2   3   3   3   -   2   3   3   3   -   2   3   3   3   -   2   3   3   3   -   2   3   3   3   -   2   3   3   3   -   2   3   3   3   -   2   3   3   3   -   2   3   3   3   -   3   3   3   -   3   3   | : I | Prac  | tical trai    | ning will be of    | ninimum six weeks duration at the  | d C                        |                            |                            |                              |                                | +                              | _                                    |   |                         |  |                                |                              |                              |                  |
| SE   | 11   | CC   | 214  |     |       |               |                    | the contract of the contract o | ciid oi                    | lour                       | tn sen                     | nester o                     | luring su                      | mmer                           | r brea                               | k and t                                 | he evaluation w         | ill be done at the end of fifth semester.  |                                |                              |                              |                  |
| SE   ETCS 214A   Theory of Computation   3   1   -   4   | 22   A   | 2   CC   | 214A   Theory of Computation   3   1   4   4   5   CC   ETCS 401A   Artificial Intelligence   3   1   -   -   -   2   1  | ŀ   | 1     | CC            | ETCS 323A          | Java Programming   | 3                          | 1                          | -                          |                              | 4                              |                                | 1                                    | СС                                      | ETCS412A                | Compiler Design  | ,                              | ,                            |                              | Т                |
| SE   | Section   Sect | SE   | 3   1  | 2   | 2     | CC            | ETCS 214A          | Theory of Computation  | 3                          | 1                          |                            |                              | 4                              |                                | 2                                    | СС                                      |                         |  | 3                              | ,                            | -                            | +                |
| CC   |  | 4 CC ETCS 206A Computer Graphics 3 1 4 4 5 CC ETCS454A Compiler Design Lab - 2 2 5 CC ETCS304A Computer Networks 1ab - 3 1 4 4 5 CC ETCS454A Advanced Incligence Lab - 2 2 1 1 5 CC ETCS304A Abunced Incligence Lab - 3 2 1 1 5 CC ETCS454A Advanced Incligence Lab - 3 2 1 1 5 CC ETCS454A Abunced Incligence Lab - 3 2 1 1 5 CC ETCS454A Abunced Incligence Lab - 3 2 1 1 5 CC ETCS454A Abunced Incligence Lab - 3 2 1 1 5 CC ETCS454A Abunced Incligence Lab - 3 2 1 1 5 CC ETCS454A Abunced Incligence Lab - 3 2 1 1 5 CC ETCS454A Abunced Incligence Lab - 3 2 1 1 5 CC ETCS454A Abunced Incline Lab - 3 2 1 1 5 CC ETCS454A Abunced Incline Lab - 3 2 1 1 5 CC ETCS454A Abunced Incline Lab - 3 2 1 1 5 CC ETCS454A Abunced Incline Lab - 3 2 1 1 5 CC ETCS454A Abunced Incline Lab - 3 2 1 1 5 CC ETCS454A Abunced Computer Architecture Incline Lab - 3 2 1 1 5 CC ETCS454A Abunced Computer Architecture Incline Lab - 3 2 1 1 5 CC ETCS454A Abunced Computer Architecture Incline Lab - 3 2 1 1 5 CC ETCS454A Abunced Computer Architecture Incline Lab - 3 2 1 1 5 CC ETCS454A Abunced Computer Architecture Incline Lab - 3 2 1 1 5 CC ETCS454A Abunced Computer Networks Lab - 3 1 2 4 CC ETCS454A Abunced Computer Networks Lab - 3 1 2 4 CC ETCS454A Abunced Computer Networks Lab - 3 1 2 1 1 5 CC ETCS454A Abunced Computer Networks Lab - 3 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | 200.   Computer Graphics   3   1   4   4   CC   ETCS454A   Compiler Design Lab   -   2   2   2   3   4   5   CC   ETCS451A   Artificial Intelligence Lab   -   2   2   2   3   5   5   CC   ETCS451A   Artificial Intelligence Lab   -   2   2   3   5   5   CC   ETCS451A   Artificial Intelligence Lab   -   2   2   3   5   5   CC   ETCS451A   Artificial Intelligence Lab   -   2   2   3   3   3   5   5   CC   ETCS451A   Artificial Intelligence Lab   -   2   2   3   3   3   5   5   CC   ETCS451A   Artificial Intelligence Lab   -   2   2   3   3   3   3   3   3   3   3   | 3   | 3     | SE            | ETEC 311A          | Microprocessor Systems   | 3                          | 1                          | -                          |                              | 4                              |                                | 3                                    | СС                                      | ETCS 202A               |  |                                | 1                            | -                            | +                |
| CC   | A  | CC   | 1  | 4   | 1     | СС            | ETCS 206A          | Computer Graphics  | 1                          | 1                          | +                          | +                            |                                | 1                              |                                      |   |                         |  | 3                              | 1                            | -                            | L                |
| CC   | SA   Computer Networks Lab   -   -   2   1   | CC   | Solution   Solution  | 5   |       | CC            | ETC\$204A          |  | -                          | 1                          | -                          | -                            | 4                              | ľ                              | 4                                    | СС                                      | ETCS454A                | Compiler Design Lab  | -                              | -                            | 2                            |                  |
| CC   | 1  | CC   | 1  | 6   |       |               | -                  |  | 3                          | 1                          | +                          | 4                            | 4                              | 5                              | 5                                    | СС                                      | ETCS451A                | Artificial Intelligence Lab  | -                              |                              | 2                            |                  |
| CC   | A   Computer Graphics Lab   -   -   2   1  | CC   | Fundamentals of iOS Development   3   1.5   2   1   2   1   3   1.5   4   9   25.5   1   5   4   9   25.5   1   5   4   9   25.5   1   5   4   9   25.5   1   5   4   9   25.5   1   5   5   5   5   5   5   5   5   | -   |       |               |                    |  | <u> </u>                   | -                          | 2                          | _                            | 1                              | 6                              | 5                                    | СС                                      | ETCS374A                | Advanced iOS Development Lab   | -                              |                              | 3                            |                  |
| Lab  | Section   Project   Proj | Lab  | Lab  | -   |       |               | _                  |  | Ŀ                          | -                          | 2                          | 4                            | 1                              | 7                              | (                                    | cc                                      | ETCS555A                | Python Programming Lab   |                                |                              | 2                            |                  |
| SE   | Practical Training I   | See   ETCS381A   Practical Training I  | State   Practical Training I   | 8   | -     |               | ETCS363A           | Lab Development  | ·                          |                            | 3                          |                              | 1.5                            | 8                              | 8                                    | SE                                      | ETCS375A                | Mini Project   |                                |                              | 8                            |                  |
| Advanced Computer Architecture   3   | 1  | OTAL   |  | 9   | -     | cc            | ETCS258A           | Computer Graphics Lab  | -                          | -                          | 2                          |                              | 1                              | 9                              |                                      |   | Elective                |  |                                |                              |                              |                  |
| TAL  | 15   4   9   25.5   TOTAL   12   4   17   2   2   4   17   2   2   4   17   2   4 | DE   | 15   4   9   25.5   TOTAL   ETCS415A   Advanced Computer Architecture   3   1   -  | 10  |       | SE            | ETCS381A           | Practical Training I   | -                          |                            | -                          |                              | 1                              | (i                             | ) [                                  | DE                                      | ETCS316A                | Web Technologies   | ,                              | 1                            | T                            |                  |
| TAL  | 15   4   9   25.5   TOTAL   12   4   17   2   2   4   17   2   2   4   17   2   4 | DE   | 15   4   9   25.5   TOTAL   12   4   17    |     |       |               |                    |  |                            |                            |                            |                              |                                | Gii                            | i) D                                 | DE .                                    | FTCS320A                | Distributed Committee Co.  | +                              | +                            | +                            |                  |
| TOTAL   15   4   9   25.5   TOTAL   12   TOTAL   13   TOTAL   12   TOTAL   13   TOTAL   14   TOTAL   15   TOTAL   15   TOTAL   15   TOTAL   12   TOTAL   15   T   | 15   4   9   25.5   TOTAL   12   4   17   2  | TOTAL  | 15   4   9   25.5   TOTAL   12   4   17   2   2   4   17   2   2   4   17   2   2   4   17   2   4   18   4   4   4   4   4   4   4   4   4   | _   | 1     |               |                    |  |                            | _                          | +                          | +                            | -                              | 1                              | +                                    |   | D100320A                | Distributed Computing Systems 3  | 1                              | 1                            |                              |                  |
| 15   4   9   25.5   TOTAL  | 1   SE   ETCS464A   Major Project   -   -   12   Machine Learning 1   -   -   2   1   Machine Learning 1   -   -   2   1 | 15   4   9   25.5   TOTAL   12   4   17  | 1   SE   ETCS464A   Major Project   -   -   12   Machine Learning Lab   -   -   2   1   Machine Learning Lab   -   2   1   Machine Le |     |       |               |                    |  |                            |                            |                            |                              |                                | (ii                            | ii) D                                | E                                       | ETCS415A                | Advanced Computer Architecture 3   | 1                              | -                            | 1                            |                  |
| SE   ETMC310A   Chasing The Raimbow: The Entreamonamental Strends   3   -   3  | Chasing the Rambow: The  | SE   ETMC310A   Chasing The Rainbow: The Electroe (without Lab)   SE   ETCS462A   Minor Project   -   -   12   6   | Chasing The Rambow: The Extraorance and the evaluation will be done at the end of seventh semester.  |     |       |               |                    |  |                            |                            |                            |                              | _                              | _                              | _                                    | _                                       |                         |  | 2 4                            | 1                            | 7                            | 2                |
| SE   ETMC310A   Chasing The Raimbow: The Entreamonamental Strends   3   -   3  | A   Chasing the Rainbow: The Entransnessurial Streak   3   -   3   | SE   | 1   SE     ETCS464A   Major Project   -   -   12   | ra  | actic | al traini     | ng will be of eigh | nt weeks duration at the end of sixth  | seme                       | ster (                     | durin                      | g sumn                       | er break                       | and                            | the ev                               | aluation                                | n will be done a        | it the end of seventh semester.  |                                |                              | _                            |                  |
| SE   ETCS462A   Minor Project   -   -   12   6   | A Minor Project 12 6 A Practical Training II 2 2 A Major Project 12 6 A Practical Training II 2 2 A Graph Theory   | SE   | Practical Training II  |     | _     |               |                    | hasing The Rainbow: The  |                            | _                          | 1.                         |                              |                                | 1.                             | _                                    |   |                         |  |                                |                              |                              |                  |
| SE   | A Practical Training II 2  At Information and Network Security 3 1 - 4  A Graph Theory 3 1 - 4  Advanced Database Management Sys 3 1 - 4  Advanced Computer Networks 3 1 - 4  Advanced Computer Networks 3 1 - 4  Advanced Computer Networks 1 - 2 1  Mobile and Wireless 3 1 - 4  Machine Learning 4 2 2 1  Machine Learning 5 2 14  Machine Learning 6 2 14  Machine Learning 8 3 1 - 4  Machine Learning 9 2 1 1 4  Machine         | SE   | A Practical Training II 2  without Lab)  A Information and Network Security 3 1 - 4  A Graph Theory 3 1 - 4  A Advanced Database Management Sys 3 1 - 4  A Advanced Database Management Sys 3 1 - 4  A Advanced Computer Networks 3 1 - 4  A Advanced Computer Networks 1 2 1  A Mobile and Wireless 3 1 - 4  A Mobile and Wireless 2 1  A Mobile and Wireless 3 1 - 4  A Mobile and Wireless 2 1  B ETCS482A Data Warehousing and Data Mining 3 1 - 4  A Machine Learning 1 3 1 - 4  TOTAL  Total Credits (CI.   |     | S     | Ε.            | ETCS462A           | Olimpinganaurial Straak  | -                          |                            | 12                         | _                            | 10                             | 1                              | JSE                                  | •                                       | ETCS464A                | Major Project  | -                              | 1.                           | 2                            |                  |
| Elective (without Lab)   |  | Elective (without Lab)   | Communication   Communicatio |     | S     | E             |                    |  | -                          | _                          | 12                         | _                            |                                | -                              | _                                    |   |                         |  | T                              | T                            | T                            |                  |
| CC   ETCS312A   Information and Network Security   3   1   4   | Information and Network Security   3   1   - 4     A Graph Theory   3   1   - 4     A Advanced Database Management Sys   3   1   - 4     A Advanced Database Management Sys   3   1   - 4     Advanced Computer Networks   3   1   - 4     Advanced Computer Networks Lab   - 2   1     Mobile and Wireless   3   1   - 4     Machine Learning   4   - 7     Machine Learning   5   1   - 4     Machine Learning   5   1   - 4     Machine Learning   6   1   - 4     Machine Learning   7   1   - 4     Machine Learning   7   1   - 4     Machine Learning   7   2   1     Machine  | CC   | A   Information and Network Security   3   1   -   4     A   Graph Theory   3   1   -   4     A   Advanced Database Management Sys   3   1   -   4     A   Advanced Database Management Sys   3   1   -   4     With Lab   |     |       |               |                    |  | -  -                       | _                          | 1-                         |                              | 4                              | 2                              |                                      |   | Open Elective           | (without Lab)  | _                              | _                            | -                            | -                |
| CC   ETCS420A   Graph Theory   3   1   - 4   | 3  | CC   | Security   Security  | )   | 0     |               |                    |  | . 1                        | _                          |                            | _                            | _                              | L                              |                                      |   |                         | (As specified by other schools)  | 1.                             | Τ.                           | T                            |                  |
| CC   ETCS420A   Advanced Database Management Sys   3   1   4   | Common Section 1 shows   Section 2   Common 1 shows   C | CC   | A   Advanced Database Management Sys   3   1   -   4   | )   | _     |               |                    |  | 3 1                        |                            | -                          | 1                            | 1                              | 3                              |                                      |   |                         |  | 1                              | 1.                           | 1                            |                  |
| Elective (with Lab)  | Advanced Database Management Sys   3   1   - 4   | CC   ETCS413A   Advanced Computer Networks   3   1   - 4   | A   Advanced Database Management Sys   3   1   -   4   | -   | _     | _             |                    |  | - 1                        |                            | -                          | 4                            | 1                              | (i)                            | DF                                   |   |                         |  | 1                              | _                            | _                            | _                |
| Elective (with Lab)  | DE   ETCS414A   Neural Network   3   1   -   | Elective (with Lab)   CC   ETCS413A   Advanced Computer Networks   3   1   - 4   | Mith Lab   Advanced Computer Networks   3   1   - 4     A Advanced Computer Networks Lab   - 2   1     A Mobile and Wireless   3   1   - 4     A Mobile and Wireless   3   1   - 4     A Mobile Learning   3   1   - 4     A Machine Learning   3   1   - 4     A Machine Learning Lab   - 2   1     A Machine Learning Lab   - 2   1     A Machine Learning Lab   - 2   1     B ETCS480A   Internet of Things   3   1   - 4     Communication Learning Lab   - 2   1     A Machine Learning Lab   - 2   1     B ETCS480A   Internet of Things   3   1   - 4     Communication Learning Lab   - 2   1     Communication Learning Lab   - 2   1     Communication Learning Lab   - 3   3   1   - 3     Communication Lab   - 3   2   3     Communication Lab   - 3   3   1   - 3     Communication La | i)  | C     | 1             | ETCS430A           | dvanced Database Management Sys  | 3 1                        |                            | -                          | _                            | _                              |                                | _                                    | _                                       |                         | Di total   | 1                              | -                            | 1                            | -                |
| Elective (with Lab)  | Advanced Computer Networks   3   1   -   4   | CC   | A Advanced Computer Networks   3   1   -   4   | _   | 1     |               |                    |  |                            |                            | _                          |                              | -                              |                                | _                                    | _                                       |                         |  | 1                              | -                            | 1                            |                  |
| CC   ETCS413A   Advanced Computer Networks   3   1   -   4   | Advanced Computer Networks   3   1   - 4   | CC   | A Advanced Computer Networks 3 1   |     |       | I             | Elective (with La  | b)   |                            | -                          | _                          |                              | -                              | (111)                          | DE                                   | -                                       |                         |  | 1                              | -                            | T                            |                  |
| DE   ETCS427A   Cloud Computing   3   CCC   ETCS427A   Mobile and Wireless   3   1   - 4   | Advanced Computer Networks Lab   - 2   1   | CC   ETCS459A   Advanced Computer Networks Lab   -   -   2   1   | A Advanced Computer Networks Lab - 2 1 1 A Mobile and Wireless Communication Communication A Mobile and Wireless Communication Communication A Mobile and Wireless Communication A Machine Learning 3 1 - 4 (ii) DE ETCS306A Data Warehousing and Data Mining Lab 2 1 1 DE ETCS306A Data Warehousing and Data Mining Lab 2 1 1 DE ETCS306A Data Warehousing and Data Mining Lab 2 1 1 DE ETCS306A Data Warehousing and Data Mining Lab 2 1 1 DE ETCS306A Data Warehousing and Data Mining Lab 2 1 1 DE ETCS306A Data Warehousing and Data Mining Lab 2 1 1 DE ETCS306A Data Warehousing and Data Mining Lab 2 2 1 1 DE ETCS306A Data Warehousing and Data  |     | C     |               |                    |  |                            |                            |                            | _                            | _                              | 4                              | 1                                    |   | Elective (with )        | (ab)   | -                              | -                            | _                            |                  |
| Advanced Computer Networks Lab   - 2   1     DE   ETCA362A   Cloud Computing Lab   - 3   CC   ETCS427A   Advanced Computer Services   3   1   - 4       DE   ETCS306A   Data Warehousing and Data Mining   3   DE   ETCS306A   Data Warehousing and Data Mining Lab   - 3   DE   ETCS471A   Data Warehousing and Data Mining Lab   - 3   DE   DECS471A   Data Warehousing and Data Mining Lab   - 3   DE   DECS471A   Data Warehousing and Data Mining Lab   - 3   DE   DECS471A   Data Warehousing and Data Mining Lab   - 3   DE   DECS471A   DATA Warehousing and Da   | Advanced Computer Networks Lab   -   2   1   | DE   ETCS452A   Advanced Computer Networks Lab   -   2   1   | Advanced Computer Networks Lab   -   2   1   |     |       | -             |                    |  | 3 1                        |                            | -                          | 4                            |                                | (3)                            | DE                                   |   | ETCS422A                | Cloud Computing  | T :                            | 1                            | Т                            |                  |
| CC   ETCS427A   Mobile and wireless   3   1   - 4  | Mobile and Wireless   3   1   - 4  | CC   ETCS427A   Mobile and wreless   3   1   - 4   | DE   ETCS306A   Data Warehousing and Data Mining   3   1   4   |     | _     |               | -                  | dvanced Computer Networks Lab  | .  -                       |                            | 2                          | 1                            |                                | (1)                            | _                                    | _                                       |                         |  | _                              | 1.                           | -                            | -                |
| CC   ETCS473A   Solution and wireless   Solution   So   | Solution   Annual Process   -   2   1  | CC   ETCS475A   Motion and wretess   -   2   1   | A Morbine Learning   3   1   -   4   | -   | CC    | E             | COTZIA             | 3  | 3 1                        |                            |                            | _                            | _                              | -                              | _                                    |   |                         |  | 1 -                            | 2                            | L                            | -                |
| CC ETCS425A Machine Learning Lab - 2 1   DE ETCS362A Data Warehousing and Data Mining Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things 3 3   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - CC ETCS471A Machine Learning Lab - 2 1   DE ETCS480A Internet of Things Lab - 2   DE ETCS480A I | DE   ETCS362A   Data Warehousing and Data Mining Lab   -   -   2   1     DE   ETCS362A   Data Warehousing and Data Mining Lab   -   -   2   1     DE   ETCS480A   Internet of Things   3   1   -   4     DE   ETCS482A   Internet of Things Lab   -   -   2   2   1     DE   ETCS482A   Internet of Things Lab   -   -   2   2   1     DE   ETCS482A   Internet of Things Lab   -   -   2   2   1     DE   ETCS482A   Internet of Things Lab   -   -   2   2   1     DE   ETCS482A   Internet of Things Lab   -   -   2   2   1   DE   ETCS482A   Internet of Things Lab   -   -   2   2   2   2   2   2   2   2   | CC   ETCS425A   Machine Learning   3   1   - 4   | DE   ETCS362A   Data Warehousing and Data Mining Lab   -   -   2   1   |     | cc    | E             | TCS473A            | obile and Wireless   | 1                          |                            | 2                          | _                            | _                              | (ii)                           |                                      |   |                         |  | 1                              | -                            |                              | 4                |
| CC ETCS471A Machine Learning Lab 2 1   DE ETCS480A   Internet of Things   3   DE ETCS482A   Internet of Things Lab   -   | Machine Learning Lab   -   2   1     DE   ETCS480A   Internet of Things   3   1   -   4  | CC ETCS471A Machine Learning Lab 2 11  FAL 9 2 14 20  TOTAL 9 2 14 1  Total Credits ICI  | Machine Learning Lab   |     | CC    |               |                    | achine Learning  | -                          | -                          | 4                          | _                            | _                              | -                              | DE                                   | 1                                       | ETCS362A                |  | 1.                             | _                            | -                            | -                |
| ETCS47/A Machine Learning Lab 2 1 DE ETCS482A Internet of Things Lab -   | Machine Learning Lab   | DE   ETCS47/A   Machine Learning Lab   -   2   1   | Machine Learning Lab   | )   |       |               |                    |  | 1                          |                            |                            | -                            | _                              | GUN                            | DE                                   | I                                       |                         | otom at - C'TS.  | +                              | _                            | _                            | -                |
|  | 9 2 14 20 TOTAL  | TAL 9 2 14 20 TOTAL 9 2 14 1   | 9 2 14 20 TOTAL 9 2 14 18  |     | Icc   | E             | ICO4/IA M          | acnine Learning Lab  | -                          |                            | 2                          | 1                            |                                | (111)                          | DE                                   | _                                       |                         |  | +1                             | -                            | _                            | -                |
|  | P   20   101AL   | 9 2 14 20 TOTAL 9 2 14 1 Total Credits ICI   | 9 2 14 18  | T   | AL    |               |                    |  |                            |                            |                            |                              |                                |                                |                                      |   |                         | -  | +                              | 12                           | -                            | 1                |
| 9   2   14   20   TOTAL  | 9 2 14 18  | Total Credits (C)  | Total Credits (C)  | -   |       |               |                    | 9  | 2                          |                            | 14                         | 20                           |                                | TOT                            | TAL                                  |   |                         |  | +                              | +                            | -                            |                  |
| 9  |  | Total Credits ICI  | Total Credits [C] 196  |     |       |               |                    |  |                            |                            |                            |                              | 7                              |                                |                                      |   | m 1 7 1 2 1 1           | 9  | 2                              | 14                           |                              | 18               |
|  |  |  |  |     | cc    |               | _                  |  | S471A Machine Learning Lab 2 | S471A Machine Learning Lab 2 1 | 5471A Machine Learning Lab 2 1 | 5471A Machine Learning Lab 2 1 (iii) | 5471A Machine Learning Lab 2 1 (iii) DE | 94.25A Machine Learning | 94.25A Machine Learning 3 1 - 4 (iii) DE ETCS480A 1 8471A Machine Learning Lab 2 1 DE ETCS482A 1 | Machine Learning   3   1   - 4 | Machine Learning   3   1   4 | Machine Learning   3   1   4 | Machine Learning |

BA

Registrar K.R. Mangalam University Sohna Road, Gurugram, (Haryana) Movement from semester to another semester Subjects with revised syllabus and name

| 21 5   | SEN  | (SE)<br>MESTER   |  | Ten 2022 Total of Studies  |                                    | per       | CHU   | -C-Das   | Tream syste  |                                  | EN SEME                 |   | -Based Curriculum Framework (LOCF)   | _       | _   | 5   | OET                              | _   |
|--|--|--|--|--|------------------------------------|-----------|---|--|--|----------------------------------|-------------------------|---|--|---------|-----|-----|----------------------------------|---|
|  | \$No   | Category   | Course Code  | Course Title   | L                                  | T         | P   | C  | EMP/ENT/SE/  |                                  | o Categor               |   | e Course Title   | Tr      | T   | P   |                                  | EMP/ENT/SI  |
|  | 1  | BS   |  | Applied Mathematics-I  | 3                                  |           | _   | 4  | SE   | 1                                | BS                      | ETMA104A  |  | 3       | _   | 1   | _                                | SE/BS   |
|  | 2  | BS   | ETPH109A   | Engineering Physics  | 3                                  | 1         | -   | 4  | SE   | 2                                | ESC                     | ETCS104A  | Introduction to Computer Science and Programming   |         |     | 1   |                                  |   |
| I  | 3  | MC   | UCES125A   | Environmental Studies  | 3                                  | 1.        | 1.  | 3  | SE   | 3                                | BS                      | ETCH119A  | in Python  Engineering Chamistry   | +       | +   |     | -                                |   |
| I  | 4  | ESC  | ETEC101A   | Basics of Electrical & Electronics Engineering   | 3                                  | -         | +   | 4  | OP   | 4                                | HSMC                    | UCCS 155A   |  | 3       | _   | 1   | -                                | _   |
| I  | 5  | ESC  |  | Basics of Mechanical Engineering   | 3                                  | -         | _   | 4  | SE   | 1 5                              | ESC                     | _   |  | 4       | +   | -   | - '                              |   |
| ı  | 6  | BS   |  |  | 1                                  | 1         | _   | -  |  | 3                                | ESC                     | ETME 155A   | A Engineering Graphics Lab   | 1.      | 1   | -   | 3 1                              | 5 SE  |
| H  | 7  | ESC  | ETPH151A<br>ETEC151A   | Engineering Physics Lab  Basics of Electrical & Electronics Engineering L  |                                    | -         | 2   |  | SE   | 6                                | ESC                     | ETCS150A  | in Python Lab  | -       |     | - 3 | 2                                | SE  |
| H  | 8  | ESC  |  |  | ž -                                | -         | 2   | 1  | SE   | 7                                | BS                      |   | Engineering Chemistry Lab  | 1-      |     | - 3 | 2                                | SE  |
| -  | TOT  |  | EIMEISIA   | Basics of Mechanical Engineering Lab   | -                                  | -         | 2   | _  | SE   | 8                                | ESC                     | ETME 157A   | Workshop Practices   | -       |     | . : | 3 1.                             | 5 SE/OP   |
| ۴  | -  | AL   |  |  | 15                                 | 4         | 6   | 22   |  | TO                               | TAL                     |   |  | 13      | 3 3 | 3 1 | 0 2                              |   |
| +  | 1  | GE   | ETMA215A   | DROD A DIL ITTA AND OT A TIOTHOGO  | _                                  | _         | _   |  |  |                                  |                         |   |  |         |     |     |                                  |   |
| H  | 2  | PCC  | EIMAZISA   | PROBABILITY AND STATISTICS   | 4                                  | -         | -   | 4  | SE   | 1                                | PCC                     | ETCS222A  | Computer Organization & Architecture   | 3       | 1   | 1   | . 4                              | SE  |
| ⊢  |  |  |  | Java Programming   | 3                                  |           | -   | 4  | SE/EMP/OP  | 2                                | PCC                     | ETCS210A  | Web Programming with Python and JavaScript   | 3       | Τ.  | 1.  | . 3                              |   |
| ⊢  | 3  | PCC  | ETCS231A   | Discrete Mathematics   | 3                                  | 1         | -   | 4  | SE/OP  | 3                                | PCC                     | ETCS220A  | Analysis and Design of Algorithms  | 3       |     | +   | 4                                |   |
| _  | 4  | PCC  | ETCS217A   | Data Structures  | 3                                  | 1         | -   | 4  | SE/EMP   | 4                                | PCC                     | ETCS307A  | Database Management Systems  | 3       | -   | -   | _                                | _   |
| L  | 5  | PCC  | ETCS367A   | Java Programming Lab   | -                                  | -         | 2   | 1  | SE/EMP/OP  | 5                                | HSMC                    | ETMC 226A   | Fundamentals of Management   | -       | -   | _   | 4                                |   |
|  | 6  | PCC  | ETCS257A   | Data Structures Lab  |                                    | -         | 2   | 1  | SE/EMP   | 6                                |                         | 220A  |  | 3       | +   | +   | -                                |   |
|  | 7  | PCC  | ETEC 210A  | Digital Electronics  | 4                                  |           | 1   | 4  |  | 0                                | -                       |   | Value Added Course   | 3       | -   | -   | 0                                | SE  |
|  | 8  | PCC  | ETEC 256A  | Digital Electronics Lab  | 4                                  | -         | -   |  | SE   | 7                                | PCC                     | ETCS 355A   | Database Management Systems Lab  | -       | -   | 2   | 1                                | EMP/ENT/  |
| _  | 9  |  |  |  | -                                  | -         | 2   | 1  | SE   | 8                                | PCC                     | ETCS262A  | Analysis and Design of Algorithms Lab  |         |     | 2   | 1                                | SE/EMP  |
|  | *  | MC   | UCDM301A   | Disaster Management  | 3                                  | -         | -   | 3  | SE   | 9                                | PCC                     | ETCS264A  | Web Programming with Python and JavaScript Lab   | -       | -   | 2   |                                  |   |
|  | -  |  |  |  |                                    |           |   |  |  |                                  |                         |   |  | +       | 1.  | 12  | 1                                | EMP/ENT/  |
| T.   | OT   |  |  |  |                                    |           |   |  |  |                                  |                         |   |  | -       | -   | +   | -                                |   |
| 10   | OTA  | AL.  |  |  | 20                                 | 3         | 6   | 26   |  | TO                               | TAL                     |   |  | -       | -   | +   | -                                |   |
| _  |  |  |  |  | -                                  |           |   | 7  |  |                                  |                         |   |  | 19      | 3   | 6   | 21                               |   |
| _  | 2  |  | ETCS211A   | Operating Systems  | 3                                  | 1         | -   | 4  | SE<br>SE   | 2                                | PCC                     | ETCS412A<br>ETCS401A  | Compiler Design Artificial Intelligence  | 3       | 1   | -   | 4                                | SE/PCC  |
| _  | 3  |  |  | Computer Networks  | 3                                  | 1         | -   | 4  | EMP/OP   | 2                                | PCC                     | ETCS 202A   |  | 3       | 1   | -   | 4                                | EMP/ENT/P   |
| _  | 4  |  |  | OS Development Lab   | -                                  | -         | 2   | 1  | EMP/ENT  | 4                                | PCC                     | ETCS451A  | Software Engineering Artificial Intelligence Lab   | 3       | 1   | -   | 4                                | EMP/ENT/OP  |
| 5  | 5  |  |  |  |                                    |           | _   |  |  |                                  |                         |   |  |         |     |     |                                  |   |
|  | _  |  |  | Computer Networks Lab  | -                                  | -         | 2   | 1  | EMP/OP   | 5                                |                         |   |  | -       | -   | 2   | 1                                | EMP/ENT/P   |
|  | 5  | PCC  | ETCS255A   | Operating System Lab   |                                    | -         | _   | _  | EMP/OP<br>SE   | 5                                |                         |   | Value Added Course   | 3       |     | -   | 0                                | EMP/ENT/P   |
| _  | 7  | PCC  | ETCS255A (ETCS381A I   | Operating System Lab<br>Practical Training I   |                                    | -         | 2   | 1 1 1  | SE   | 5                                | PCC                     | ETCA264A  |  | 3       | -   | -   | 0                                | SE  |
| 8  | 6 7 8  | PCC<br>PROJ  | ETCS255A (ETCS381A I   | Operating System Lab<br>Practical Training I<br>Value Added Course   | 3                                  | -         | _   | 1  | SE<br>EMP  | 5<br>6<br>7                      | PCC                     | ETCA264A<br>Elective I  | Value Added Course  Mobile Application Development Lab   | 3       | -   | -   | 0                                | EMP/ENT/PO<br>SE<br>EMP/ENT/PO                          |
| 9  | 6 7 8  | PCC<br>PROJ  | ETCS255A (ETCS381A I   | Operating System Lab<br>Practical Training I   | 3                                  | -         | 2   | 1  | SE<br>EMP<br>SE  | 5<br>6<br>7<br>(i)               | PCC<br>PEC              | ETCA264A<br>Elective I<br>ETCS420A  | Value Added Course  Mobile Application Development Lab  Graph Theory   | 3       |     | -   | 0                                | SE  |
| 9  | 6 7 8  | PCC<br>PROJ  | ETCS255A (ETCS381A I   | Operating System Lab<br>Practical Training I<br>Value Added Course   | 3                                  | -         | 2   | 1 1 0  | SE<br>EMP  | (ii)                             | PCC PEC PEC             | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A  | Value Added Course  Mobile Application Development Lab  Graph Theory  Distributed Computing Systems  | 3       | -   | -   | 0                                | SE<br>EMP/ENT/P   |
| 9  | 6 7 8 9 0                                      | PCC<br>PROJ<br>PROJ  | ETCS255A (ETCS381A I   | Operating System Lab<br>Practical Training I<br>Value Added Course   | 3                                  | -         | 2   | 1 1 0  | SE<br>EMP<br>SE  |                                  | PCC PEC PEC             | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A                                | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture                               | 3       | -   | -   | 0 1 3                            | SE<br>EMP/ENT/Pe<br>SE/PEC                              |
| 9  | 6 7 8  | PCC<br>PROJ<br>PROJ  | ETCS255A (ETCS381A I   | Operating System Lab Practical Training I Value Added Course Mini Project  | 3                                  | -         | 2   | 1 1 0  | SE<br>EMP<br>SE  | (ii)<br>(iii)<br>8               | PCC PEC PEC PEC PROJ    | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A                                | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture Minor Project                 | 3 3 3 - | -   |     | 3 3                              | SE<br>EMP/ENT/PI<br>SE/PEC<br>EMP/PEC                   |
| 8<br>9<br>10                                       | 6 7 8 9 0 0 DTAI                               | PCC<br>PROJ<br>PROJ  | ETCS255A ETCS381A I  | Operating System Lab Practical Training I Value Added Course Mini Project  | 12 3                               | 3 6       | - 6   | 1 1 0 3  | SE<br>EMP<br>SE<br>EMP   | (ii)<br>(iii)<br>8<br><b>TOT</b> | PCC PEC PEC PROJ        | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A                    | Value Added Course  Mobile Application Development Lab  Graph Theory  Distributed Computing Systems  Advanced Computer Architecture  Minor Project             | 3       | -   |     | 0<br>1<br>3<br>3<br>3            | SE EMP/ENT/P SE/PEC EMP/PEC EMP/PEC                     |
| 8<br>9<br>10                                       | 6 7 8 9 0 0 DTAI                               | PCC<br>PROJ<br>PROJ  | ETCS255A ETCS381A I  | Operating System Lab Practical Training I Value Added Course Mini Project  | 12 3                               | 3 6       | - 6   | 1 1 0 3  | SE<br>EMP<br>SE<br>EMP   | (ii)<br>(iii)<br>8<br><b>TOT</b> | PCC PEC PEC PROJ        | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A                    | Value Added Course  Mobile Application Development Lab  Graph Theory  Distributed Computing Systems  Advanced Computer Architecture  Minor Project             | 3 3 3 - | -   |     | 3 3 3 5                          | SE EMP/ENT/P SE/PEC EMP/PEC EMP/PEC                     |
| 8<br>9<br>10                                       | 6 7 8 9 0 0 DTAI                               | PCC PROJ PROJ L cal training   | ETCS255A ETCS381A I  | Operating System Lab Practical Training I Value Added Course Mini Project  t weeks duration at the end of sixth semester descriptions.   | 12 3                               | 3 6       | - 6   | 1 1 0 3  | SE<br>EMP<br>SE<br>EMP   | (ii)<br>(iii)<br>8<br><b>TOT</b> | PCC PEC PEC PROJ        | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A                    | Value Added Course  Mobile Application Development Lab  Graph Theory  Distributed Computing Systems  Advanced Computer Architecture  Minor Project             | 3 3 3 - | -   |     | 3 3 3 5                          | SE EMP/ENT/P SE/PEC EMP/PEC EMP/PEC                     |
| 8<br>9<br>10<br>0                                  | 6<br>77<br>8<br>8<br>9<br>9<br>00              | PCC PROJ PROJ L cal training   | ETCS255A ETCS381A I  | Operating System Lab Practical Training I  /alue Added Course  // Alue Added Course  //  | 12 3                               | 3 6       | - 6   | 1 1 0 3  | SE<br>EMP<br>SE<br>EMP   | (ii)<br>(iii)<br>8<br><b>TOT</b> | PCC PEC PEC PROJ        | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A                    | Value Added Course  Mobile Application Development Lab  Graph Theory  Distributed Computing Systems  Advanced Computer Architecture  Minor Project             | 3 3 3 - | -   |     | 3 3 3 5                          | SE EMP/ENT/P SE/PEC EMP/PEC EMP/PEC                     |
| 8<br>9<br>10<br>0                                  | 6 77 83 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9    | PCC PROJ PROJ L cal training PROJ POJ  | ETCS255A ETCS381A I ETCS375A N will be of eight ETCS464A M ETCS464A P  | Operating System Lab Practical Training I Value Added Course Mini Project  t weeks duration at the end of sixth semester descriptions.   | 12 3                               | 3 6       | - 6   | 1<br>1<br>0<br>3<br>19   | SE EMP SE EMP  | (ii)<br>(iii)<br>8<br><b>TOT</b> | PCC PEC PEC PROJ        | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A                    | Value Added Course  Mobile Application Development Lab  Graph Theory  Distributed Computing Systems  Advanced Computer Architecture  Minor Project             | 3 3 3 - | -   |     | 3 3 3 5                          | SE EMP/ENT/P SE/PEC EMP/PEC EMP/PEC                     |
| 8<br>9<br>10<br>0                                  | 6 77 83 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9    | PCC PROJ PROJ L cal training PROJ POJ E  | ETCS255A (ETCS381A IN  | Operating System Lab Practical Training I Value Added Course Mini Project  t weeks duration at the end of sixth semester of tajor Project ractical Training II   | 12 3                               | 3 6       | - 6   | 1<br>1<br>0<br>3<br>19<br>er brea  | SE<br>EMP<br>SE<br>EMP   | (ii)<br>(iii)<br>8<br><b>TOT</b> | PCC PEC PEC PROJ        | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A                    | Value Added Course  Mobile Application Development Lab  Graph Theory  Distributed Computing Systems  Advanced Computer Architecture  Minor Project             | 3 3 3 - | -   |     | 3 3 3 5                          | SE EMP/ENT/P SE/PEC EMP/PEC EMP/PEC                     |
| 8<br>9<br>10                                       | 6 77 83 99 90 90 90 90 90 90 90 90 90 90 90 90 | PCC PROJ PROJ L  cal training PROJ POJ POJ PEC                                       | ETCS255A (ETCS381A IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII  | Operating System Lab Practical Training I Value Added Course Mini Project  t weeks duration at the end of sixth semester of tajor Project ractical Training II   | 12 3                               | 3 6       | - 6   | 1<br>1<br>0<br>3<br>19<br>er brea  | SE EMP SE EMP  k and the evaluation of the evalu | (ii)<br>(iii)<br>8<br><b>TOT</b> | PCC PEC PEC PROJ        | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A                    | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture Minor Project  enth semester. | 3 3 3 - | -   |     | 0<br>1<br>3<br>3<br>3<br>5<br>22 | SE<br>EMP/ENT/P<br>SE/PEC<br>EMP/PEC<br>EMP/PEC<br>EMP  |
| 8<br>9<br>10<br>0<br>2<br>3                        | 6 77 83 99 90 90 90 90 90 90 90 90 90 90 90 90 | PROJ PROJ PROJ PROJ PROJ POJ PROJ POJ POJ POJ PEC PEC                                | ETCS255A (ETCS381A IN  | Operating System Lab Practical Training I Value Added Course Mini Project  t weeks duration at the end of sixth semester of fajor Project ractical Training II atural Language Processing  | 12 3                               |           | 2   | 1<br>1<br>0<br>3<br>19<br>er brea<br>6<br>2  | SE EMP SE EMP  k and the evalu:  EMP/ENT EMP/ENT   | (ii) (iii) 8 TOT                 | PCC PEC PEC PEC PROJ AL | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A<br>the end of seve | Value Added Course  Mobile Application Development Lab  Graph Theory  Distributed Computing Systems  Advanced Computer Architecture  Minor Project             | 3 3 3 - | -   |     | 3 3 3 5                          | SE EMP/ENT/P SE/PEC EMP/PEC EMP/PEC                     |
| 8<br>9<br>10<br>0<br>2<br>3<br>i)                  | 5<br>7<br>3<br>3<br>9<br>0<br>0<br>0<br>TAI    | PCC PROJ PROJ  L  cal training POJ PC PEC PEC PEC PEC                                | ETCS255A (ETCS381A IN  | Operating System Lab Practical Training I Value Added Course Mini Project  t weeks duration at the end of sixth semester of tajor Project ractical Training II atural Language Processing atural Language Processing atural Language Processing atural Language Processing Lab   | 12 3<br>lurin                      |           | - 6   | 1 1 0 3 19 er brea 6 2 4 1   | SE EMP SE EMP  k and the evaluation of the evalu | (ii) (iii) 8 TOT                 | PCC PEC PEC PEC PROJ AL | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A<br>the end of seve | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture Minor Project  enth semester. | 3 3 3 - | -   |     | 0<br>1<br>3<br>3<br>3<br>5<br>22 | SE<br>EMP/ENT/P<br>SE/PEC<br>EMP/PEC<br>EMP/PEC<br>EMP  |
| 8<br>9<br>10<br>0<br>2<br>3<br>i)                  | 5<br>7<br>3<br>3<br>9<br>0<br>0<br>0<br>TAI    | PCC PROJ PROJ  L  cal training PROJ POJ POJ PEC PEC PEC PEC PEC                      | ETCS255A (ETCS381A IN  | Operating System Lab Practical Training I  /alue Added Course  // Alue Added Course  //  | 12 3 durin                         | 3 (dag su | 2<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- | 1<br>1<br>0<br>3<br>19<br>er brea<br>6<br>2  | SE EMP SE EMP  k and the evalue  EMP/ENT EMP/ENT EMP/ENT EMP/ENT   | (ii) (iii) 8 TOT                 | PCC PEC PEC PEC PROJ AL | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A<br>the end of seve | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture Minor Project  enth semester. | 3 3 3 - | -   |     | 0<br>1<br>3<br>3<br>3<br>5<br>22 | SE<br>EMP/ENT/P<br>SE/PEC<br>EMP/PEC<br>EMP/PEC<br>EMP  |
| 8 9 10 Pr. 1 2 3 i) ii)                            | 5 77 88 99 100 100 100 100 100 100 100 100 100 | PROJ PROJ PROJ PROJ PROJ PROJ PROJ POJ PEC PEC PEC PEC PEC                           | ETCS255A CETCS381A IN INC. INC. INC. INC. INC. INC. INC. I   | Operating System Lab Practical Training I  Jalue Added Course  Mini Project  t weeks duration at the end of sixth semester of  Indicate the semester of the se | 12 3 durin                         | 3 (g su   | 2<br>   | 1 1 0 3 19 er brea 6 2 4 1 4 1 1   | SE EMP SE EMP  k and the evalue  EMP/ENT EMP/ENT EMP/ENT EMP/ENT EMP/ENT EMP/ENT   | (ii) (iii) 8 TOT                 | PCC PEC PEC PEC PROJ AL | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A<br>the end of seve | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture Minor Project  enth semester. | 3 3 3 - | -   |     | 0<br>1<br>3<br>3<br>3<br>5<br>22 | SE<br>EMP/ENT/P<br>SE/PEC<br>EMP/PEC<br>EMP/PEC<br>EMP  |
| 8<br>9<br>10<br>0<br>r:<br>1<br>2<br>3<br>i)<br>i) | 5 77 88 99 100 100 100 100 100 100 100 100 100 | PROJ PROJ PROJ PROJ PROJ PROJ PROJ POJ PEC PEC PEC PEC PEC                           | ETCS255A CETCS381A INTEGRATION | Operating System Lab Practical Training I  Jalue Added Course  Mini Project  t weeks duration at the end of sixth semester of  Indicate the semester of the se | 12 3 durin                         | 3 (g su   | 2<br>   | 1 1 0 3 3 19 er brea 6 2 4 1 4 1 4 1 4   | SE EMP SE EMP  k and the evalu:  EMP/ENT EMP/ENT EMP/ENT EMP/ENT EMP/ENT EMP/ENT EMP/ENT EMP/ENT   | (ii) (iii) 8 TOT                 | PCC PEC PEC PEC PROJ AL | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A<br>the end of seve | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture Minor Project  enth semester. | 3 3 3 - | -   |     | 0<br>1<br>3<br>3<br>3<br>5<br>22 | SE<br>EMP/ENT/P<br>SE/PEC<br>EMP/PEC<br>EMP/PEC<br>EMP  |
| 8<br>9<br>10<br>0<br>1<br>2<br>3<br>i)<br>ii)      | 5 77 88 99 100 100 100 100 100 100 100 100 100 | PCC PROJ  PROJ  L  cal training  PROJ POJ PEC    | ETCS255A (ETCS381A IN  | Operating System Lab Practical Training I Value Added Course Mini Project  t weeks duration at the end of sixth semester of fajor Project ractical Training II atural Language Processing atural Language Processing Lab ata Warchousing and Data Mining   | 12 3 durin                         | 3 (g su   | 2<br>   | 1 1 0 3 19 er brea 6 2 4 1 4 1 1   | SE EMP SE EMP  k and the evalue  EMP/ENT EMP/ENT EMP/ENT EMP/ENT EMP/ENT EMP/ENT   | (ii) (iii) 8 TOT                 | PCC PEC PEC PEC PROJ AL | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A<br>the end of seve | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture Minor Project  enth semester. | 3 3 3 - | -   |     | 0<br>1<br>3<br>3<br>3<br>5<br>22 | SE<br>EMP/ENT/Pi<br>SE/PEC<br>EMP/PEC<br>EMP/PEC<br>EMP |
| 8<br>9<br>10<br>Pr:<br>1<br>2<br>3<br>ii)          | 5 77 88 99 100 100 100 100 100 100 100 100 100 | PCC PROJ  PROJ  L  cal training  PROJ POJ PEC    | ETCS255A (ETCS381A IN  | Operating System Lab Practical Training I Value Added Course Mini Project  t weeks duration at the end of sixth semester of fajor Project ractical Training II atural Language Processing atural Language Processing Lab ata Warchousing and Data Mining   | 12 3                               | 3 (g su   | 2<br>   | 1<br>1<br>0<br>3<br>19<br>19<br>4<br>1<br>4<br>1<br>4<br>1   | SE EMP SE EMP  K and the evaluation  EMP/ENT EMP/ENT EMP/ENT EMP/ENT EMP/ENT EMP/ENT EMP/ENT EMP/ENT   | (ii) (iii) 8 TOT                 | PCC PEC PEC PEC PROJ AL | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A<br>the end of seve | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture Minor Project  enth semester. | 3 3 3 - | -   |     | 0<br>1<br>3<br>3<br>3<br>5<br>22 | SE<br>EMP/ENT/P<br>SE/PEC<br>EMP/PEC<br>EMP/PEC<br>EMP  |
| 8<br>9<br>10<br>0<br>Pr:<br>1<br>2<br>3<br>ii)     | 5 77 88 99 100 100 100 100 100 100 100 100 100 | PCC PROJ PROJ PROJ PROJ POJ PEC                  | ETCS255A CETCS381A INTEGENERAL | Operating System Lab Practical Training I Value Added Course Mini Project  t weeks duration at the end of sixth semester of fajor Project ractical Training II  atural Language Processing atural Language Processing Lab atat Warchousing and Data Mining ata Warchousing and Data Mining atat Warchousing and Data Mining Lab cural Network cural Network cural Network cural Network Lab   | 12 3                               | 3 (g su   | 2   | 1<br>1<br>0<br>3<br>19<br>19<br>4<br>4<br>1<br>4<br>1<br>1<br>4  | SE EMP SE EMP  K and the evalue  EMP/ENT   | (ii) (iii) 8 TOT                 | PCC PEC PEC PEC PROJ AL | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A<br>the end of seve | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture Minor Project  enth semester. | 3 3 3 - | -   |     | 0<br>1<br>3<br>3<br>3<br>5<br>22 | SE<br>EMP/ENT/P<br>SE/PEC<br>EMP/PEC<br>EMP/PEC<br>EMP  |
| 8<br>9<br>10<br>0<br>Pr:<br>1<br>2<br>3<br>ii)     | 5 77 88 99 100 100 100 100 100 100 100 100 100 | PROJ PROJ PROJ PROJ PROJ PROJ PROJ POJ PEC       | ETCS255A (ETCS381A IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII  | Operating System Lab Practical Training I Value Added Course Mini Project  t weeks duration at the end of sixth semester of fajor Project ractical Training II  atural Language Processing atural Language Processing Lab atat Warchousing and Data Mining ata Warchousing and Data Mining ata Warchousing and Data Mining Lab cural Network cural Network cural Network Lab oud Computing oud Computing oud Computing oud Computing Lab   | 12 3 durin                         | 3 g su    | 2   | 1 1 0 3 3 19 19 19 4 1 1 4 1 1 4 1 1   | SE EMP SE EMP  K and the evalu:  EMP/ENT   | (ii) (iii) 8 TOT                 | PCC PEC PEC PEC PROJ AL | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A<br>the end of seve | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture Minor Project  enth semester. | 3 3 3 - | -   |     | 0<br>1<br>3<br>3<br>3<br>5<br>22 | SE<br>EMP/ENT/P<br>SE/PEC<br>EMP/PEC<br>EMP/PEC<br>EMP  |
| 8<br>9<br>10<br>Pr:<br>1<br>2<br>3<br>ii)          | 5 77 88 99 100 100 100 100 100 100 100 100 100 | PROJ PROJ  PROJ  PROJ  PROJ  PROJ  PROJ  PEC  PEC  PEC  PEC  PEC  PEC  PEC  PE       | ETCS255A (ETCS381A IN  | Operating System Lab Practical Training I Value Added Course Mini Project  t weeks duration at the end of sixth semester of tajor Project Training II  | 12 3  durin  4 4 4 4 4 4 4 4 4 4 4 | 3 g su    | 2   | 1 1 0 3 19 19 19 14 1 1 4 1 1 4 1 1 4 1 1 4 1 1 4 1 1 4 1 1 4 1 1 4 1 1 1 4 1 1 1 1 4 1  | SE EMP SE EMP  K and the evaluation  EMP/ENT   | (ii) (iii) 8 TOT                 | PCC PEC PEC PEC PROJ AL | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A<br>the end of seve | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture Minor Project  enth semester. | 3 3 3 - | -   |     | 0<br>1<br>3<br>3<br>3<br>5<br>22 | SE<br>EMP/ENT/P<br>SE/PEC<br>EMP/PEC<br>EMP/PEC<br>EMP  |
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| 8 9 9 11(1 OO O O O O O O O O O O O O O O O O      | 5 77 88 99 100 100 100 100 100 100 100 100 100 | PCC PROJ PROJ POJ PEC                            | ETCS255A CETCS381A I ETCS375A I ETCS375A I ETCS375A I ETCS464A I ETCS464A I ETCS464A I ETCS426A I ETCS426A I ETCS426A I ETCS423A I ETCS425A I E | Operating System Lab Practical Training I Value Added Course Mini Project  It weeks duration at the end of sixth semester of Iajor Project Training II  Atural Language Processing Atural Language Processing Lab Ata Warehousing and Data Mining Ata Warehous | 12 3 durin                         |           | 2   | 1 1 0 3 3 19 19 19 4 1 1 4 4 1 1 4 4 1 1 4 4 1 1 4 4 1 1 4 4 1 1 4 4 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 1 4 4 1 1 1 1 4 4 1 | SE EMP SE EMP SE EMP  K and the evalue  EMP/ENT  | (ii) (iii) 8 TOT                 | PCC PEC PEC PEC PROJ AL | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A<br>the end of seve | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture Minor Project  enth semester. | 3 3 3 - | -   |     | 0<br>1<br>3<br>3<br>3<br>5<br>22 | SE<br>EMP/ENT/P<br>SE/PEC<br>EMP/PEC<br>EMP/PEC<br>EMP  |
| 8 9 110 OO     | 5 77 88 99 100 100 100 100 100 100 100 100 100 | PCC PROJ PROJ POJ PEC                            | ETCS255A (ETCS375A ETCS375A ETCS375A ETCS375A ETCS375A ETCS464A ETCS464A ETCS465A ETCS465A ETCS465A ETCS466A ETCS46A ETCS46 | Operating System Lab Practical Training I Value Added Course Mini Project  t weeks duration at the end of sixth semester of fajor Project Training II Training II Training II Training II atural Language Processing Training II atural Language Processing at Training II atural Language Processing Lab Training II atural Network Lab Tr | 12 3 durin                         |           | 2   | 1 1 0 3 3 19 19 19 4 1 1 4 4 1 1 4 4 1 1 4 4 1 1 4 4 1 1 4 4 1 1 4 4 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 1 4 4 1 1 1 1 4 4 1 | SE EMP SE EMP  K and the evaluation  EMP/ENT   | (ii) (iii) 8 TOT                 | PCC PEC PEC PEC PROJ AL | ETCA264A<br>Elective I<br>ETCS420A<br>ETCS309A<br>ETCS310A<br>ETCS462A<br>the end of seve | Value Added Course Mobile Application Development Lab  Graph Theory Distributed Computing Systems Advanced Computer Architecture Minor Project  enth semester. | 3 3 3 - | -   |     | 0<br>1<br>3<br>3<br>3<br>5<br>22 | SE EMP/ENT/P  SE/PEC EMP/PEC EMP/PEC EMP                |

lectives can be offered as MOOC courses. The students has to appear in Swayam courses and appear for examinations to earn credits.

| EMP     | Employablity  |  |  |  |  |  |  |
|---------|---|--|--|--|--|--|--|
| SE      | Skill Enhancement   |  |  |  |  |  |  |
| ENT     | Entrepreneurship  |  |  |  |  |  |  |
| OP      | Open Elective   |  |  |  |  |  |  |
| HSMC    | Humanities, Social Science and Management   |  |  |  |  |  |  |
| BS      | Basic Science   |  |  |  |  |  |  |
| ESC     | Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computer |  |  |  |  |  |  |
| мс      | Mandatory Courses   |  |  |  |  |  |  |
| OEC     | Open Elective   |  |  |  |  |  |  |
| PROJ    | Projects / Industrial Training/ Seminar   |  |  |  |  |  |  |
| PEC     | Professional Elective Courses   |  |  |  |  |  |  |
| PCC PCC | Professional Core Courses   |  |  |  |  |  |  |

ACADMIC YEAR 2015-2019

PROGRAM: B.TECH (CSE)

| ETCC464 | MAJOR PROJECT | L | T | P | C |
|---------|---------------|---|---|---|---|
| E1CS464 | MAJOR PROJECT |   | - | - | 6 |

Students are expected to prepare Major projects on topics of general importance using new software and presentation tools. Students will also prepare a project report along with implementation and present it for the final evaluation.

Registra

K.R. Mangalam University Sohna Road, Gurugram, (Haryana) School of Engineering & Technology (SOET)
K.R. Mangalam University

Sohna road, Gurugram Haryana 122103

Verified By: DEAN ,SOET

ACADMIC YEAR 2016-2020

| ETCS464 | MAJOR PROJECT | L | T | P | C |
|---------|---------------|---|---|---|---|
| E1C5404 | WAJOR PROJECT | - | - | - | 6 |

Students are expected to prepare Major projects on topics of general importance using new software and presentation tools. Students will also prepare a project report along with implementation and present it for the final evaluation.

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ACADMIC YEAR 2017-2021

|         | MA TOD DDG HEGT | L | T | P | C |
|---------|-----------------|---|---|---|---|
| ETCS464 | MAJOR PROJECT   | - | - | - | 6 |

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Haryana 122103 Verified By: DEAN ,SOET ACADMIC YEAR 2018-2022

|         | MA YOU BROJECT | L | T | P | C |
|---------|----------------|---|---|---|---|
| ETCS464 | MAJOR PROJECT  | - | - | - | 6 |

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Registrar

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K.R. Mangalam University
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Haryana 122103

Verified By: DEAN ,SOET

PROGRAM: B.TECH (CSE)

| PERCENCIA | MAJOR PROJECT | L | T | P  | C |
|-----------|---------------|---|---|----|---|
| ETCS464A  | MAJOR PROJECT | - | - | 12 | 6 |

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K.R. Mangalam University Sohna Road, Gurugram, (Haryana)

DEAN

School of Engineering & Technology (SOET)
K.R. Mangalam University
Sohna road, Gurugram

Verified BY:DEAN, SOET

| ETCS490A                | Industrial Internship | L | T | P | C  |
|-------------------------|-----------------------|---|---|---|----|
| Version 1.0             |                       | _ | _ |   | 12 |
| Pre-requisites/Exposure |                       |   |   |   | 12 |
| Co-requisites           |                       |   |   |   |    |

#### **Course Objectives**

- 1. To learn how to carry out extensive research/study in the area of project implementation.
- To be associated with an area of research/research project and contribute towards domain knowledge.
- 3. To learn technical report/project documentation writing.
- 4. To learn and implement the technology that in being used is the specific industry where the training is carried out.

#### **Course Outcomes**

On completion of this course, the students will be able to

- CO1. Carry out the extensive literature survey/study in the area on internship provided.
- C02. Write technical documentation for the project implement.
- CO3. Analyze and develop various methods and techniques applicable to the topic to study/area of implementation.
- CO4. Have practical knowledge on the applications of project of implementation on society.

### **Catalog Description**

The student will carry out a minimum of six months in industry or appropriate workplace/academic and research institutions in India/abroad. The internship should give exposure to the practical aspects of the discipline. In addition, the student may also work on a specified task or project which may be assigned to him/her. The outcome of the internship/industrial training should be presented in the form of a report.

#### **Course Content**

The assignment will be defined by the organization where the student will carry of his industrial training.

# Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination Examination Scheme:

| Components    | Quiz | Attenda | Mid Term | Presentation/    | End Term |
|---------------|------|---------|----------|------------------|----------|
|               |      | nce     | Exam     | Assignment/ etc. | Exam     |
| Weightage (%) | 10   | 10      | 20       | 10               | 50       |

## Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

|     | Mapping between COs and POs   | )                       |
|-----|---|-------------------------|
|     | Course Outcomes (COs)   | Mapped Program Outcomes |
| CO1 | Carry out the extensive literature survey/study in the area on internship provided.                         | PO2                     |
|     | Write technical documentation for the project implement.  |                         |
| CO2 |   | PO5                     |
|     | Analyze and develop various methods and techniques applicable to the topic to study/area of implementation. |                         |
| CO3 |   | PO3                     |
| CO4 | Have practical knowledge on the applications of project   | PO6                     |

| ETCS 490A              | Course Code  |                                 |
|------------------------|--------------|---------------------------------|
| Industrial Internsh ip | Course Title |                                 |
|                        | PO1          | Engineering Knowledge           |
| 3                      | PO2          | Problem analysis                |
| 3                      | PO3          | Design/development of solutions |
|                        |              |                                 |

|   | PO4   | Conduct investigations of complex problems |
|---|-------|--|
| 3 | P O 5 | Modern tool usage                          |
| 2 | PO 6  | The engineer and society                   |
|   | PO7   | Environment and sustainability             |
|   | P O 8 | Ethics                                     |
|   | PO9   | Individual or team work                    |
|   | PO10  | Communication                              |
|   | PO11  | Project management and finance             |
|   | PO12  | Life-long Learning                         |
| 3 | PSO1  | Application of Concepts                    |
|   | PSO2  | Innovation and Industry Friendly           |
| 2 | PSO3  | Ethics and Communication Skills            |

1=weakly mapped

2= moderately mapped

3=strongly mapped

B-0

|      | Ethics and Communication Skills |
|------|---------------------------------|
| PSO3 |                                 |

1=weakly mapped

2= moderately mapped

3=strongly mapped