



| Sr. No.      | Course Code    | Course Type                                            | Name of the Subject                                                       | Teaching Scheme (Hrs./week) |    |     |               |              |       | Examination Scheme and Marks |     |    |    |    |       | Credit |    |     |       |
|--------------|----------------|--------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------|----|-----|---------------|--------------|-------|------------------------------|-----|----|----|----|-------|--------|----|-----|-------|
|              |                |                                                        |                                                                           | TH                          | PR | TUT | Contact Hours | Self Learnin | Total | CCE                          | ESE | TW | PR | OR | TOTAL | TH     | PR | TUT | TOTAL |
| Semester-III |                |                                                        |                                                                           |                             |    |     |               |              |       |                              |     |    |    |    |       |        |    |     |       |
| 1            | R25-AI-PCC-201 | Program Core course - 1                                | Data Structures                                                           | 3                           | -  | -   | 45            | 45           | 90    | 40                           | 60  | -  | -  | -  | 100   | 3      | -  | -   | 3     |
| 2            | R25-AI-PCC-202 | Program Core course - 2                                | Software Engineering                                                      | 3                           | -  | -   | 45            | 45           | 90    | 40                           | 60  | -  | -  | -  | 100   | 3      | -  | -   | 3     |
| 3            | R25-AI-PCC-203 | Program Core course - 3                                | Object Oriented Programming                                               | 3                           | -  | -   | 45            | 45           | 90    | 40                           | 60  | -  | -  | -  | 100   | 3      | -  | -   | 3     |
| 4            | R25-AI-MDM-204 | Multidisciplinary Course-1                             | Foundational Mathematics for AI & DS                                      | 3                           | -  | -   | 45            | 45           | 90    | 40                           | 60  | -  | -  | -  | 100   | 3      | -  | -   | 3     |
| 5            | R25-AI-OEC-205 | Open Elective - 1                                      | To be chosen from a basket of Open Elective- I finalized at college level | 2                           | -  | -   | 30            | 30           | 60    | 40                           | 60  | -  | -  | -  | 100   | 2      | -  | -   | 2     |
| 6            | R25-AI-EEM-206 | Entrepreneurship/ Economics/ Management course         | Entrepreneurship Development                                              | 1                           | 2  | -   | 45            | 15           | 60    | 25                           | -   | 25 | -  | -  | 50    | 1      | 1  | -   | 2     |
| 7            | R25-AI-VEC-207 | Value Education Course                                 | Universal Human Values & Ethics                                           | 2                           | -  | -   | 30            | 30           | 60    | 50                           | -   | -  | -  | -  | 50    | 2      | -  | -   | 2     |
| 8            | R25-AI-PCC-208 | Program Core Course- Lab                               | Data Structures Lab                                                       | -                           | 2  | -   | 30            | -            | 30    | -                            | -   | 25 | 25 | -  | 50    | -      | 1  | -   | 1     |
| 9            | R25-AI-PCC-209 | Program Core Course Lab / Multidisciplinary Course-Lab | Object oriented Programming lab                                           | -                           | 2  | -   | 30            | -            | 30    | -                            | -   | 25 | 25 | -  | 50    | -      | 1  | -   | 1     |

**Chairman**

BoS, Artificial Intelligence & Data Science  
Amrutvahini College of Engineering, Amrutnagar  
Sangamner-422608

**Chairman  
Academic Council**

Amrutvahini College of Engineering, Amrutnagar  
Sangamner-422608



|    |                |                                              |                              |           |           |          |            |            |            |            |            |            |           |          |            |           |          |          |           |
|----|----------------|----------------------------------------------|------------------------------|-----------|-----------|----------|------------|------------|------------|------------|------------|------------|-----------|----------|------------|-----------|----------|----------|-----------|
| 10 | R25-AI-CEP-210 | Community Engagement Project / Field Project | Community Engagement Project | -         | 4         | -        | 60         | -          | 60         | -          | -          | 50         | -         | -        | 50         | -         | 2        | -        | 2         |
|    |                |                                              | <b>Total</b>                 | <b>17</b> | <b>10</b> | <b>0</b> | <b>405</b> | <b>255</b> | <b>660</b> | <b>275</b> | <b>300</b> | <b>125</b> | <b>50</b> | <b>0</b> | <b>750</b> | <b>17</b> | <b>5</b> | <b>0</b> | <b>22</b> |

**Note: Open Elective basket and MDM Courses offered at college level, are enlisted after Sem-VIII.**

**Chairman**

BoS, Artificial Intelligence & Data Science  
Amrutvahini College of Engineering, Amrutnagar  
Sangamner-422608

**Chairman**  
**Academic Council**

Amrutvahini College of Engineering, Amrutnagar  
Sangamner-422608



| Semester-IV |                |                                               |                                            |                             |           |          |               |               |            |                              |            |           |           |          |            |           |          |          |           |
|-------------|----------------|-----------------------------------------------|--------------------------------------------|-----------------------------|-----------|----------|---------------|---------------|------------|------------------------------|------------|-----------|-----------|----------|------------|-----------|----------|----------|-----------|
| Sr. No      | Course Code    | Course Type                                   | Name of the Subject                        | Teaching Scheme (Hrs./week) |           |          |               |               |            | Examination Scheme and Marks |            |           |           |          |            | Credit    |          |          |           |
|             |                |                                               |                                            | TH                          | PR        | TUT      | Contact Hours | Self Learning | Total      | CCE                          | ESE        | TW        | PR        | OR       | TOTAL      | TH        | PR       | TUT      | TOTAL     |
| 1           | R25-AI-PCC-211 | Program Core course - 4                       | Artificial Intelligence                    | 3                           | -         | -        | 45            | 45            | 90         | 40                           | 60         | -         | -         | -        | 100        | 3         | -        | -        | 3         |
| 2           | R25-AI-PCC-212 | Program Core course - 5                       | Data Science                               | 2                           | -         | -        | 30            | 30            | 60         | 40                           | 60         | -         | -         | -        | 100        | 2         | -        | -        | 2         |
| 3           | R25-AI-PCC-213 | Program Core course - 6                       | Database management Systems                | 3                           | -         | -        | 45            | 45            | 90         | 40                           | 60         | -         | -         | -        | 100        | 3         | -        | -        | 3         |
| 4           | R25-AI-MDM-214 | Multidisciplinary Course - 2                  | Embedded System & Internet of Things       | 2                           | -         | -        | 30            | 30            | 60         | 40                           | -          | -         | -         | -        | 100        | 2         | -        | -        | 2         |
| 5           | R25-AI-OEC-215 | Open Elective - 2                             | Open Elective-II                           | 2                           | -         | -        | 30            | 30            | 60         | 40                           | 60         | -         | -         | -        | 100        | 2         | -        | -        | 2         |
| 6           | R25-AI-VSC-216 | Vocational Skill Course                       | AI & DS Lab                                | -                           | 4         | -        | 60            | -             | 60         | 25                           | -          | -         | 25        | -        | 50         | 1         | 1        | -        | 2         |
| 7           | R25-AI-AEC-217 | Ability Enhancement Course                    | Modern Indian Language & Technical Writing | -                           | 2         | -        | 30            | -             | 60         | 25                           | -          | 25        | -         | -        | 50         | 1         | 1        | -        | 2         |
| 8           | R25-AI-EEM-218 | Entrepreneurship/Economics/ Management course | Technology Commercialization & Startup     | 1                           | 2         | -        | 45            | 15            | 60         | 50                           | -          | -         | -         | -        | 50         | 2         | -        | -        | 2         |
| 9           | R25-AI-PCC-219 | Program Core Course-Lab                       | Database management Systems Lab            | -                           | 2         | -        | 30            | -             | 30         | -                            | -          | -         | 25        | -        | 25         | -         | 1        | -        | 1         |
| 10          | R25-AI-PCC-220 | Program Core Course Lab                       | Embedded System & Internet of Things Lab   | -                           | 2         | -        | 30            | -             | 30         | -                            | -          | -         | 25        | -        | 25         | -         | 1        | -        | 1         |
| 11          | R25-AI-VEC-221 | Value Education Course                        | Sustainable Development                    |                             |           |          |               |               |            |                              |            |           |           |          |            |           |          |          |           |
|             |                |                                               | <b>Total</b>                               | <b>14</b>                   | <b>14</b> | <b>0</b> | <b>420</b>    | <b>210</b>    | <b>660</b> | <b>350</b>                   | <b>240</b> | <b>25</b> | <b>75</b> | <b>-</b> | <b>750</b> | <b>18</b> | <b>4</b> | <b>-</b> | <b>22</b> |

**Chairman**

BoS, Artificial Intelligence & Data Science  
Amrutvahini College of Engineering, Amrutnagar  
Sangamner-422608

**Chairman  
Academic Council**

Amrutvahini College of Engineering, Amrutnagar  
Sangamner-422608



**Exit option: Award of UG Diploma in Major with 88 credits and an additional 8 credits from following Exit Courses**

| Course Code     | Course Title                        | L | T | P  | Credits | Contact Hrs | TW  | OR | Total Marks |
|-----------------|-------------------------------------|---|---|----|---------|-------------|-----|----|-------------|
| R25-AI-EXC-101A | Python web frameworks such as Flask | – | – | –  | 4       | –           | 100 |    | 100         |
| R25-AI-EXC-101B | Project                             | – | – | 16 | 4       | 16          | 50  | 50 | 100         |
| <b>Total</b>    |                                     |   |   |    |         |             |     |    | <b>200</b>  |

**Chairman**

BoS, Artificial Intelligence & Data Science  
Amrutvahini College of Engineering, Amrutnagar  
Sangamner-422608

**Chairman**  
**Academic Council**

Amrutvahini College of Engineering, Amrutnagar  
Sangamner-422608