## IIIT RK Valley

## Rajiv Gandhi University of Knowledge Technologies-AP Computer Science and Engineering Course Structure from 2015 Batch Onwards

| EI Semester-I                                  |   |                       |                            |                  |                       |  |  |
|--|---|-----------------------|----------------------------|------------------|-----------------------|--|--|
| Course Code                                    | Name of the Course  | L                     | T&PS                       | P                | Credits               |  |  |
| MA2101   | Discrete Mathematics  | 2                     | 2                          | 0                | 4                     |  |  |
| EN502  | Advanced English & Communication Skills Lab-I   | 0                     | 0                          | 2                | 2                     |  |  |
| CS1101   | Programming with C  | 2                     | 2                          | 0                | 4                     |  |  |
| CS1102   | Web Technologies  | 2                     | 2                          | 0                | 4                     |  |  |
| EC1107   | Digital Logic Design  | 2                     | 2                          | 0                | 4                     |  |  |
| CS1701   | Programming with C Lab  | 0                     | 0                          | 2                | 2                     |  |  |
| CS1702   | Web Technologies Lab  | 0                     | 0                          | 2                | 2                     |  |  |
| EC1707   | Digital Logic Design Lab  | 0                     | 0                          | 2                | 2                     |  |  |
|  | Total Credits   |                       |                            |                  | 24                    |  |  |
|  | EI Semester-II  |                       |                            |                  |                       |  |  |
| <b>Course Code</b>                             | Name of the Course  | L                     | T&PS                       | P                | Credits               |  |  |
| MA1101   | Engineering Mathematics-I   | 2                     | 2                          | 0                | 4                     |  |  |
| EN602  | Advanced English & Communication Skills Lab-II  | 0                     | 0                          | 2                | 2                     |  |  |
| CS1201   | Computer Organization and Architecture  | 2                     | 2                          | 0                | 4                     |  |  |
| CS1202   | Data Structures   | 2                     | 2                          | 0                | 4                     |  |  |
| CS1203   | Formal Language and Automata Theory   | 2                     | 2                          | 0                | 4                     |  |  |
| CS1204   | Introduction to Social Networking   | 1                     | 1                          | 0                | 2                     |  |  |
| CS1801   | Computer Organization and Architecture Lab  | 0                     | 0                          | 2                | 2                     |  |  |
| CS1802   | Data Structure Lab  | 0                     | 0                          | 2                | 2                     |  |  |
| Total Credits                                  |   |                       |                            |                  | 24                    |  |  |
|  | E1 Summer Semester  |                       |                            |                  |                       |  |  |
| <b>Course Code</b>                             | Name of the Course  | L                     | T&PS                       | P                | Credits               |  |  |
| MA2204   | Probability and Statistics  | 2                     | 2                          | 0                | 4                     |  |  |
|  | ,   |                       |                            |                  |                       |  |  |
|  |   |                       |                            |                  |                       |  |  |
|  | Total Credits   |                       |                            |                  | 4                     |  |  |
| E2 Summer Semester-I                           |   |                       |                            |                  |                       |  |  |
| <b>Course Code</b>                             | Name of the Course  | L                     | T&PS                       | P                | Credits               |  |  |
| EN702  | Advanced English & Communication Skills Lab-III   | 0                     | 0                          | 2                | 2                     |  |  |
|  |   | 0                     |                            |                  |                       |  |  |
| CS2101   | Object Oriented Programming   | 2                     | 2                          | 0                | 4                     |  |  |
| CS2101<br>CS2102                               | Object Oriented Programming Operating System  | _                     |                            | 0                | 4                     |  |  |
|  |   | 2                     | 2                          |                  |                       |  |  |
| CS2102   | Operating System  | 2                     | 2 2                        | 0                | 4                     |  |  |
| CS2102<br>CS2103                               | Operating System  Database Management System  | 2 2 2                 | 2 2 2                      | 0                | 4                     |  |  |
| CS2102<br>CS2103<br>CS2104                     | Operating System  Database Management System  Design and Analysis of Algorithm  | 2<br>2<br>2<br>2      | 2<br>2<br>2<br>2           | 0 0 0            | 4 4 4                 |  |  |
| CS2102<br>CS2103<br>CS2104<br>CS2105           | Operating System  Database Management System  Design and Analysis of Algorithm  Introduction to Data Analytics                                  | 2<br>2<br>2<br>2<br>1 | 2<br>2<br>2<br>2<br>1      | 0<br>0<br>0      | 4<br>4<br>4<br>2      |  |  |
| CS2102<br>CS2103<br>CS2104<br>CS2105<br>CS2701 | Operating System  Database Management System  Design and Analysis of Algorithm  Introduction to Data Analytics  Object Oriented Programming Lab | 2<br>2<br>2<br>2<br>1 | 2<br>2<br>2<br>2<br>1<br>0 | 0<br>0<br>0<br>0 | 4<br>4<br>4<br>2<br>2 |  |  |

|                    | E2 Summer Semester-II                          |               |      |   |         |
|--------------------|--|---------------|------|---|---------|
| <b>Course Code</b> | Name of the Course                             | L             | T&PS | P | Credits |
| EN802              | Advanced English & Communication Skills Lab-IV | 0             | 0    | 2 | 2       |
| CS2201             | Software Engineering                           | 2             | 2    | 0 | 4       |
| CS2202             | Computer Networks                              | 2             | 2    | 0 | 4       |
| CS2203             | Mobile Application Development                 | 2             | 2    | 0 | 4       |
| CS2204             | Introduction to Cloud Computing                | 1             | 1    | 0 | 2       |
| CS2205             | Introduction to Robotics                       | 1             | 1    | 0 | 2       |
| CS2206             | Introduction to Artificial Intelligence        | 1             | 1    | 0 | 2       |
| CS2801             | Software Engineering Lab                       | 0             | 0    | 2 | 2       |
| CS2802             | Computer Networks Lab                          | 0             | 0    | 2 | 2       |
| CS2803             | Mobile Application Development Lab             | 0             | 0    | 2 | 2       |
|                    | Total Credits                                  |               |      |   | 26      |
|                    | E2 Summer Sem                                  |               |      |   |         |
| <b>Course Code</b> | Name of the Course                             | L             | T&PS |   | Credits |
| CS2301             | Placement Skills                               | 4             | 4    | 0 | 2       |
| CS2901             | Networking Technologies                        | 4             | 4    | 0 | 4       |
|                    | Total Credits                                  |               |      |   | 6       |
|                    |  |               |      |   |         |
|                    | E3 Semester-I                                  |               |      | _ |         |
| Course Code        | Name of the Course                             | L             | T&PS | P | Credits |
|                    | Elective-I                                     | 2             | 2    | 0 | 4       |
|                    | Elective-II                                    | 2             | 2    | 0 | 4       |
|                    | Elective-III                                   | 2             | 2    | 0 | 4       |
| BMXXXX             | Free Elective-I                                | 2             | 2    | 0 | 4       |
| CS3700             | Mini Project                                   | 2             | 2    | 0 | 4       |
| C53700             | Total Credits                                  |               |      | U | 20      |
|                    | E3 Semester-II                                 |               |      |   | 20      |
| Course Code        | Name of the Course                             | L             | T&PS | P | Credits |
| Course Coue        | Elective-IV                                    | 2             | 2    | 0 | 4       |
|                    | Elective-V                                     | 2             | 2    | 0 | 4       |
|                    | Elective-VI                                    | 2             | 2    | 0 | 4       |
|                    | Free Elective-II                               | $\frac{2}{2}$ | 2    | 0 | 4       |
| CS3800             | Mini Project                                   | 2             | 2    | 0 | 4       |
| 222000             | Total Credits                                  |               |      | Ü | 20      |
|                    | E3 Summer Sem                                  |               |      |   | 20      |
| Course Code        | Name of the Course                             | L             | T&PS | P | Credits |
| CS3900             | Summer Internship                              | +=            | 1415 | Ĥ | 4       |
|                    | Total Credits                                  |               |      |   | 4       |
|                    | E4 Semester-I                                  |               |      |   | •       |
| <b>Course Code</b> | Name of the Course                             | L             | T&PS | P | Credits |
| HS3201             | Environmental Science                          | 2             | 2    | 0 | 4       |
|                    | Elective-VII                                   | 2             | 2    | 0 | 4       |
|                    | Free Elective-III                              | 2             | 2    | 0 | 4       |
|                    | •  |               |      |   |         |
| CS4700             | Project  |               |      |   | 6       |

| E4 Semester-II      |                    |   |      |     |         |  |
|---------------------|--------------------|---|------|-----|---------|--|
| <b>Course Code</b>  | Name of the Course | L | T&PS | P   | Credits |  |
|                     | Elective-VIII      | 2 | 2    | 0   | 4       |  |
|                     | Elective-IX        | 2 | 2    | 0   | 4       |  |
|                     | Free Elective-IV   | 2 | 2    | 0   | 4       |  |
| CS4800              | Project            |   |      |     | 6       |  |
| CS4900              | Community Service  |   |      |     | 2       |  |
| Total Credits       |                    |   |      | 20  |         |  |
| Grand Total Credits |                    |   |      | 192 |         |  |