

## KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE, WARANGAL HONOURS IN Computer Science and ENGINEERING (HCS)

## **HONOURS CURRICULUM**

EQUIVALENT MOOCs - ODD SEMESTER, JULY-DEC 2020, AY 2020-21

| S.No | Course Code Name  |                            | EQUIVALENT COURSES OFFERED BY                         |                  |                                    |                |                |                  |                |                           |                  |  |
|------|---|----------------------------|---|------------------|------------------------------------|----------------|----------------|------------------|----------------|---------------------------|------------------|--|
|      | HONOURS ELECTIVE<br>COURSES<br>(any 6 to 9 courses to earn 18<br>credits) |                            | SWAYAM-   | SWAYAM-NPTEL     |                                    |                | COURSERA/UDEMY |                  |                | SPOKEN TUTORIAL<br>- IITB |                  |  |
|      |   |                            | Course Name   | С                | Course Dates*                      | Course<br>Name | С              | Course<br>Dates* | Course<br>Name | С                         | Course<br>Dates* |  |
| 1    | 1 U18HCS001   | Data Science               | Scalable Data Science<br>(8 weeks)                    | 2 to             | CCD: Sep 14,2020<br>to Dec 18,2020 |                | _              | CCD:             |                | -                         | CCD:             |  |
|      |   |                            | noc20-cs61  |                  | LDR: Sep 21,2020                   |                |                | LDR:             |                |                           | LDR:             |  |
| 2    | U18HCS1002  | Reinforcement<br>Learning  | Reinforcement Learning (12 weeks)                     | 3                | CCD: Sep14,2020<br>to Dec 18,2020  |                | _              | CCD:             |                | _                         | CCD:             |  |
|      |   | Learning                   | noc20-cs74  |                  | LDR: Sep 21,2020                   |                |                | LDR:             |                |                           | LDR:             |  |
| 3    | U18HCS1003  | Applied<br>Natural         | Applied Natural<br>Language Processing                | 3                | CCD: Sep 14,2020<br>to Dec 18,2020 |                |                | CCD:             |                |                           | CCD:             |  |
| 3    | 01811C31003   | Language<br>Processing     | (12 weeks)<br>noc20-cs87                              | 3                | LDR: Sep 21,2020                   | 1              | -              | LDR:             |                | 1                         | LDR:             |  |
| 4    |   | Deep Learning for Computer | Deep learning<br>(12 weeks)                           |                  | CCD: Sep14,2020<br>to Dec 18,2020  |                | -              | CCD:             |                | _                         | CCD:             |  |
|      |   | Vision                     | noc20-cs88  |                  | LDR:                               |                |                | LDR:             |                |                           | LDR:             |  |
|      |   | Object<br>Oriented         | Object Oriented System Development using              |                  | CCD: Sep14,2020<br>to Dec 19,2020  |                |                | CCD:             |                |                           | CCD:             |  |
| 5    | U18HCS1005  | System Development         | UML,Java, and Patternso 3<br>(12 weeks)<br>noc20-cs84 | LDR: Sep 21,2020 |                                    | -              | LDR:           |                  | -              | LDR:                      |                  |  |
|      |   | Embedded                   |   |                  | CCD:                               |                |                | CCD:             |                |                           | CCD:             |  |
| 6    | U18HCS1006  | Systems Design             |   | 3                | LDR:                               |                | -              | LDR:             |                | -                         | LDR:             |  |

| 7  | U18HCS1007 | Soft<br>Computing  |   | 2 | CCD:<br>LDR:                          |   | - | CCD:<br>LDR:  | <br>_ | CCD:<br>LDR: |
|----|------------|--|---|---|---------------------------------------|---|---|---|-------|--------------|
| 8  | U18HCS1008 | Privacy and<br>Security issues<br>in Cloud and<br>Social Media |   | 2 | CCD:<br>LDR:                          |   | _ | CCD:  | <br>- | CCD:         |
| 9  | U18HCS1009 | Computational<br>Geometry                                      |   | 3 | CCD:<br>LDR:                          |   | - | CCD:<br>LDR:  | <br>_ | CCD:<br>LDR: |
| 10 | U18HCS1010 | Software<br>Defined<br>Networking                              |   | 1 | CCD:                                  | UDEMY: Course on Introduction to Software Defined Networking and Open | 2 | CCD: Jul<br>27,2020(<br>Student can<br>join at any<br>instance) | <br>- | CCD:         |
|    |            |  |   |   |                                       | Flow<br>(8-weeks)   |   |   |       |              |
| 11 | U18HCS1011 | Google Cloud<br>Computing<br>Foundations                       | Google Cloud Computing Foundations noc20-cs96 (8-weeks) | 2 | CCD: Sep 14,2020<br>LDR: Sep 21, 2020 |   | - | CCD:  | <br>- | CCD:<br>LDR: |
| 12 | U18HCS1012 | Parallel<br>Programming<br>in OpenMP                           |   | - | CCD:<br>LDR:                          |   | - | CCD:<br>LDR:  | <br>- | CCD:<br>LDR: |
| 13 | U18HCS1013 | Virtual Reality<br>Technologies                                |   | - | CCD:                                  | UDEMY: Introduction to Virtual Reality with Unity- Tool               | 2 | CCD: Jul<br>27,2020(<br>Student can<br>join at any<br>instance) | <br>- | CCD:         |
|    |            |  |   |   | LDR:                                  | (8-weeks)   |   | LDR: -  |       | LDR:         |

| 14 | U18HCS1014 | BlockChain<br>Applications | <br>1 | CCD: | UDEMY: BlockChain Developers with Ethereum | 2 | CCD: Jul<br>27,2020(<br>Student can<br>join at any<br>instance) | <br>- | CCD: |
|----|------------|----------------------------|-------|------|--|---|---|-------|------|
|    |            |                            |       | LDR: | (8-weeks)                                  |   | LDR: -  |       | LDR: |
| 15 | U18HCS1015 | and Hadoop                 | <br>- | CCD: | UDEMY: Big Data Hadoop and Spark with      | 2 | CCD: Jul<br>27,2020(<br>Student can<br>join at any              | <br>_ | CCD: |
|    |            | Technologies               |       | LDR: | Scala<br>(8-weeks)                         |   | instance) LDR: -  |       | LDR: |

I. In exigency situations such as the student already completed the listed compulsory courses(s) on his/her own interest during previous semesters through valid MOOCs etc, the HoD in consultation with Dean-AA shall propose an alternative course(s) for the specific scenario, after verification of relevant documents.

- II. By the end of April of every academic year, the department in consultation with Dean-AA, shall
  - A. notify the list of equivalent courses in SWAYAM-NPTEL MOOCs / other standard MOOCs against the list of courses notified under Honours curriculum
  - B. propose a new course(s) in the place of any listed course(s) in the Honours curriculum, in case no equivalent course is found in MOOCs

## \*C: Credits ; CCD: Course Commencement Date; LDR: Last Date of Registration

| -  |            | Laboratory Co  | Laboratory Courses ( any 2 courses ) – TO BE TAKEN IN THE PARENT DEPARTMENT |         |  |  |  |  |  |
|----|------------|--|---|---------|--|--|--|--|--|
| 16 | Honours    | U18HCS1016   | U18HCS1016 Cloud Computing Laboratory                                       |         |  |  |  |  |  |
| 17 | Laboratory | U18HCS1017 Data Science with R-Tool Laboratory         |   |         |  |  |  |  |  |
| 18 | Courses    | U18HCS1018 Machine Learning with Tensorflow Laboratory |   |         |  |  |  |  |  |
| 19 |            | U18HCS1019   | Image Processing with Python Laboratory                                     | credits |  |  |  |  |  |
|    |            |  | Total Credits to be earned  | 18+2    |  |  |  |  |  |

Date: MOOCs Coordinator Head of the Department Dean, Academic Affairs