



KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE, WARANGAL
HONOURS IN ELECTRONICS AND COMMUNICATION ENGINEERING (HEC)- HONOURS CURRICULUM
EQUIVALENT MOOCs - ODD SEMESTER, JULY-DEC 2020, AY 2020-21

| S. No | Course Code | Course Name | EQUIVALENT COURSES OFFERED BY | | | | | | | | |
|---|-------------|--|---|---|---------------------|------------------|---|---------------|------------------------|----|---------------|
| | | | SWAYAM-NPTEL | | | COURSERA / UDEMY | | | SPOKEN TUTORIAL - IITB | | |
| HONOURS ELECTIVE COURSES (any 6 to 9 courses to earn 18 credits) | | | Course Name | C | Course Dates* | Course Name | C | Course Dates* | Course Name | C | Course Dates* |
| 1 | U18HEC1001 | Digital VLSI Testing | <i>Digital VLSI Testing (3)</i> | 3 | CCD: 14 Sep 2020 | -- | - | CCD: | -- | -- | CCD: |
| | | | | | LDR: 21 Sep 2020 | | | LDR: | | | LDR: |
| 2 | U18HEC1002 | Coding Theory | <i>An Introduction to Coding Theory (2)</i> | 2 | CCD: 14 Sep 2020 | -- | - | CCD: | -- | 3 | CCD: |
| | | | | | LDR: 21 Sep 2020 | | | LDR: | | | LDR: |
| 3 | U18HEC1003 | Modern Digital Communication Techniques | -- | - | CCD: | -- | | CCD: | -- | - | CCD: |
| | | | | | LDR: | | | LDR: | | | LDR: |
| 4 | U18HEC1004 | Computer Vision and Image Processing-Fundamentals and Applications | -- | - | CCD: | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: | | | LDR: | | | LDR: |
| 5 | U18HEC1005 | Software Defined Radio | <i>Basics of software defined Radios and Practical Applications (1)</i> | 1 | CCD: 14 Sep 2020 | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: 21 Sep 2020 | | | LDR: | | | LDR: |
| 6 | U18HEC1006 | Millimeter Wave Technology | <i>Millimeter Wave Technology (2)</i> | 2 | CCD: 14 Sep 2020 | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: 21 Sep 2020 | | | LDR: | | | LDR: |

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| 7 | U18HEC1007 | Multirate DSP | -- | - | CCD: 20.07.2020 | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: 27.07.2020 | | | LDR: | | | LDR: |
| 8 | U18HEC1008 | Microwave Theory and Techniques | <i>Microwave Theory and Techniques (3)</i> | 3 | CCD: 14 Sep 2020 | -- | 2 | CCD: | -- | - | CCD: |
| | | | | | LDR: 21 Sep 2020 | | | LDR: | | | LDR: |
| 9 | U18HEC1009 | Fabrication Techniques for MEMs-based Sensors : Clinical Perspective | <i>Fabrication Techniques for MEMs-based sensors : clinical perspective (3)</i> | 3 | CCD: 14 Sep 2020 | - | - | CCD: | -- | - | CCD: |
| | | | | | LDR: 21 Sep 2020 | | | LDR: | | | LDR: |
| 10 | U18HEC1010 | Principles of Signal Estimation for MIMO/ OFDM Wireless Communication | <i>Principles of Signal Estimation for MIMO/ OFDM Wireless Communication (3)</i> | 3 | CCD: 14 Sep 2020 | -- | - | CCD: | -- | 2 | CCD: 20.07.2020 |
| | | | | | LDR: 21 Sep 2020 | | | LDR: | | | LDR: 27.07.2020 |
| 11 | U18HEC1011 | Deep Learning for Computer Vision | <i>Deep Learning for Computer Vision (3)</i> | 3 | CCD: 14 Sep 2020 | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: 21 Sep 2020 | | | LDR: | | | LDR: |
| 12 | U18HEC1012 | Artificial Intelligence | <i>Artificial Intelligence Search Methods For Problem Solving (3)</i> | 3 | CCD: 14 Sep 2020 | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: 21 Sep 2020 | | | LDR: | | | LDR: |
| 13 | U18HEC1013 | Industrial Internet of things | <i>Introduction to Industry 4.0 and Industrial Internet of Things (3)</i> | 3 | CCD: 14 Sep 2020 | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: 21 Sep 2020 | | | LDR: | | | LDR: |

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| 14 | U18HEC1014 | Robotics | Introduction to robotics (3) (or) Robotics (2) & Foundations of Cognitive Robotics (1) | 3 | CCD: 14 Sep 2020 | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: 21 Sep 2020 | | | LDR: | | | LDR: |
| 15 | U18HEC1015 | Data Science | Scalable Data Science (2) & Python for Data Science (1) (or) Data Science for Engineers (2) & Python for Data Science (1) | 3 | CCD: 14 Sep 2020 | -- | 3 | CCD: | -- | 3 | CCD: |
| | | | | | LDR: 21 Sep 2020 | | | 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
- notify the list of equivalent courses in SWAYAM-NPTEL MOOCs / other standard MOOCs against the list of courses notified under Honours curriculum
 - 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 Courses (any 2 courses) - TO BE TAKEN IN THE PARENT DEPARTMENT | | | |
|--|---|------------|---|
| - | Honours Laboratory Courses | U18HEC1016 | VLSI Design Laboratory |
| 16 | | U18HEC1017 | Advanced Communication Laboratory |
| 17 | | U18HEC1018 | Signal Processing and Applications Laboratory |
| 18 | | U18HEC1019 | Antenna Design Laboratory |
| 19 | | | |
| <i>Total Credits to be earned</i> | | | 2 credits |
| <i>Total Credits to be earned</i> | | | 18+2 |

Date:

MOOCs Coordinator

Head of the Department

Dean, Academic Affairs