

KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE, WARANGAL

HONOURS IN ELECTRONICS COMMUNICATION AND INSTRUMENTATION ENGINEERING (HCI)- HONOURS CURRICULUM

EQUIVALENT MOOCs - ODD SEMESTER, JULY-DEC 2021, AY 2021-22

| S. No | Course Code | Course Name | EQUIVALENT COURSES OFFERED BY | | | | | | | | |
|----------|--|--|--|---|---------------------|------------------|---|------------------|---------------------------|------|------------------|
| | HONOURS ELECTIVE COURSES (any 6 to 9 courses to earn 18 credits) | | SWAYAM-NPTEL | | | COURSERA / UDEMY | | | SPOKEN TUTORIAL - IITB | | |
| | | | Course Name | С | Course Dates* | Course Name | С | Course Dates* | Course Name | С | Course Dates* |
| 1 | U18HCI1001 | Advanced Sensors and Actuators | | 3 | LDR: | | _ | CCD : | | | CCD: |
| | | | | | LDR: | | | LDR : | | | LDR: |
| 2 | U18HCI1002 | Mathematical Foundation for Machine Learning | Essential Mathematics for Machine Learning(3) | 3 | CCD: 26 Jul 2021 | | - | CCD : | | CCD: | |
| | | | | | LDR: 02 Aug 2021 | | | LDR : | | | LDR: |
| 3 | U18HCI1003 | Advanced IoT and its Applications | Introduction to | 3 | CCD: 26 Jul 2021 | | | CCD : | | - | CCD: |
| | | | Industry 4.0 and Industrial Internet of Things (3) | | LDR: 02 Aug 2021 | | | LDR : | | | LDR: |
| 4 | U18HCI1004 | Artificial Intelligence Applications | Artificial Intelligence Search | 3 | CCD: 26 Jul 2021 | | | CCD : | | | CCD: |
| 4 | U18HC11004 | | Methods For Problem Solving (3) | 3 | LDR: 02 Aug 2021 | | - | LDR : | | - | LDR: |
| 5 | U18HCI1005 | Op-Amp Applications: Design and Implementation | Op-Amp Practical Applications: | 1 | CCD: 26 Jul 2021 | | - | CCD : | | - | CCD: |

| | | | Design, Simulation and Implementation | | LDR: 02 Aug 2021 | | | LDR : | | | LDR: |
|----|-------------|---|--|---|------------------------|---|---|----------|--|------|------|
| 6 | U18HCI1006 | Advanced communicatio n systems | | 2 | CCD: 26 Jul 2021 | | _ | CCD : | | - | CCD: |
| | | n systems | | | LDR: 02 Aug 2021 | | | LDR : | | | LDR: |
| 7 | U18HCI1007 | Data Science for Engineers | Python for Data Science (1) & | 3 | CCD: 26 Jul 2021 | | 1 | CCD : | | - | CCD: |
| | | | Data Science for Engineers (2) | | LDR: 02 Aug 2021 | | | LDR : | | | LDR: |
| 8 | U18HCI1008 | Biomedical signal and Image processing | | 3 | CCD: | | 2 | CCD : | | _ | CCD: |
| | CTOTICTIOUS | | | | LDR: | | 2 | LDR : | | | LDR: |
| 9 | U18HCI1009 | Advanced Digital Signal Processing | | 3 | CCD: | _ | _ | CCD : | | _ | CCD: |
| | Croncino | | | 5 | LDR: | | | LDR : | | | LDR: |
| 10 | U18HCI1010 | Photonics and Applications | Integrated Photonics Devices and Circuits(3) | 3 | CCD: 26 Jul 2021 | | | CCD : | | | CCD: |
| | OTORICHOTO | | (-, | | LDR: 02 Aug 2021 | | | LDR : | | LDR: | |
| 11 | U18HCI1011 | | Microelectronics: | 3 | CCD: 26 Jul 2021 | | 1 | CCD : | | - | CCD: |
| | | Microelectronics | Devices To Circuits(3) | | LDR: 02 Aug 2021 | | | LDR : | | LDR: | |

| 12 | U18HCI1012 | Artificial Intelligence Digital VLSI Testing | Artificial Intelligence Search Methods For Problem Solving (3) | 3 | CCD: 26 Jul 2021 | | | CCD : | | | CCD: |
|----|------------|--|---|---------------------|---------------------|--|----------|----------|--|------|------|
| | | | | | LDR: 02 Aug 2021 | | _ | LDR : | | - | LDR: |
| | | Software Defined Radio | Basics of software defined Radios | | CCD: 26 Jul 2021 | | | CCD : | | | CCD: |
| 13 | U18HCI1013 | | and Practical Applications (1) | 1 | LDR: 02 Aug 2021 | | - | LDR : | | - | LDR: |
| | U18HCI1014 | mm Wave communication | Millimeter Wave Technology (2) | 2 | CCD: | | - | CCD : | | | CCD: |
| 14 | | | | | LDR: | | | LDR : | | - | LDR: |
| 15 | U18HCI1015 | Deep Learning for Computer Vision | Deep Learning for Computer Vision (3) | 3 | CCD: 26 Jul 2021 | | 3 | CCD : | | 3 | CCD: |
| | | | | LDR: 02 Aug 2021 | | | 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 Cou | irses (any 2 courses) - TO BE TAKEN IN THE PARENT DEPARTM | ENT |
|----|------------|----------------|---|---------|
| 16 | Honours | U18HCI1016 | Sensors and Applications Laboratory | |
| 17 | Laboratory | U18HCI1017 | Advanced Communications Laboratory | 2 |
| 18 | Courses | U18HCI1018 | Advanced Signal Processing and Applications | credits |
| | | | Laboratory | creatis |
| 19 | | U18HCI1019 | Advanced VLSI Design Laboratory | |
| | | | Total Credits to be earned | 18+2 |

Sd/Date:30.06.2021

Sd/Dr. B. Rama Devi
Down Head of the Department

Sd/Dr.V. Rajagopal
Head of the Department

Dean, Academic Affairs