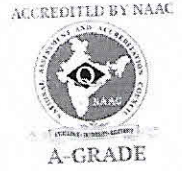


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**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**  
(Established by Govt. Act No. 30 of 2008)  
**Kukatpally, Hyderabad – 500 085, Telangana (India)**

**BN Bhandari**  
Ph. D. (IIT, Kgp.)  
**Professor of Electronics & Commn. Engg.,**  
**Director, Academic & Planning**

Date: 24.07.2019

Lr. No. DAPO/SWAYAM/2019

To  
All the Principals of Constituent and Affiliated Colleges of JNTUH

Sir/Madam,

Sub: JNT University Hyderabad – Directorate of Academic & Planning - Implementing the MOOCs Courses through SWAYAM platform as Electives in R16 B.Tech. IV Year I Semester from the academic year 2019-20.

Ref: 1. Engineering stream BOS Chairpersons Meeting held on .  
2. Minutes of the XLII Meeting of the Standing Committee of the Academic Senate held on 22.07.2019.

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As per the guidelines of UGC, AICTE and MHRD, Govt. of India, the University implemented the MOOCs Courses through SWAYAM platform, included as Electives in R16 III Year II Semester B.Tech. courses, in the Academic Year 2018-19. In continuation of this, as recommended by the BOS Chairpersons, the University approved the following list of SWAYAM Courses to include as Electives in R16 IV. Year I Semester B.Tech. courses for the academic year 2019-20, vide 2<sup>nd</sup> reference cited:

| Name of the Department                 | Professional Elective – II                           | Professional Elective – III            | Professional Elective – IV              |
|--|--|--|---|
| Civil Engineering                      | Sustainable Materials and Green Buildings (12 Weeks) | Environmental Geotechniques (12 Weeks) | Advanced Concrete Technology (12 Weeks) |
|  | Design of Masonry Structures (12 Weeks)              | --                                     | --                                      |
| Electrical and Electronics Engineering | Operating System Fundamentals (12 Weeks)             | --                                     | --                                      |
|  | Introduction to Internet of things (12 Weeks)        | --                                     | --                                      |

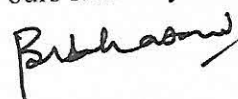
|  |  |   |   |
|--|--|---|---|
| <b>Mechanical Engineering</b>                    | Industrial Safety Engineering (12 Weeks)       | Fundamentals of Gas Dynamics (12 Weeks)                               | Manufacturing Systems Technology Part I & II (12 Weeks)                 |
|  | Dynamic Behaviour of Materials (12 Weeks)      | Noise Management and Control (12 Weeks)                               | Engineering Fracture Mechanics (12 Weeks)                               |
| <b>Electronics and Communication Engineering</b> | Pattern Recognition and Application (12 Weeks) | Introduction to Wireless and Cellular Communications (12 Weeks)       | Principles of Modern CDMA/ MIMO/ OFDM Wireless Communications (8 Weeks) |
|  | Introduction to Machine Learning (12 Weeks)    | Principles and Techniques of Modern Radar Systems (12 Weeks)          | Introduction to Computer Vision (12 Weeks)                              |
| <b>Electronics and Instrumentation</b>           | Digital Image Processing (12 Weeks)            | Sensors and Actuators (12 Weeks)                                      | Pattern Recognition and Application (12 Weeks)                          |
| <b>Computer Science and Engineering</b>          | The Joy of Computing Using Python (12 Weeks)   | Introduction to Machine Learning (12 Weeks)                           | Blockchain Architecture Design and Use Cases (12 Weeks)                 |
|  | Introduction to Internet of things (12 Weeks)  | Software Project Management (12 Weeks)                                | Social Networks (12 Weeks)  |
| <b>Information Technology</b>                    | The Joy of Computing Using Python (12 Weeks)   | Artificial Intelligence Search Methods for Problem Solving (12 Weeks) | Blockchain Architecture Design and Use Cases (12 Weeks)                 |
|  | Introduction to Internet of things (12 Weeks)  | Software Project Management (12 Weeks)                                | Social Networks (12 Weeks)  |

In view of the above, Options are given to the students of R16 B.Tech. IV Year I Semester to choose Professional Electives in the curriculum offered by the University or choose the MOOCs Courses through SWAYAM platform from the above approved list, for the academic year 2019-20.

Further, you are requested to take the following steps in your colleges for implementing the MOOCs Courses through SWAYAM platform:

- i. Establish a SWAYAM NPTEL Local Chapter in the colleges through online. For registration of Local Chapter visit: <https://nptel.ac.in/LocalChapter/>.
- ii. The details of Single Point of Contact (SPOC) person of your college coordinating with NPTEL is to be sent to [daposwayam@jntuh.ac.in](mailto:daposwayam@jntuh.ac.in) and Examination Branch of JNTUH.
- iii. From the List of SWAYAM courses were identified by the University, the students can chose Professional Electives in R16 B.Tech. IV Year I Semester for the academic year 2019-20. Interested students should register in <https://onlinecourses.nptel.ac.in> for SWAYAM courses from the upcoming semester and they should pass and get NPTEL Online Certificate. Registration of courses has already started. For further information visit: <https://swayam.gov.in/> and <https://nptel.ac.in/>

Yours sincerely



DIRECTOR