



University College of Engineering

(AUTONOMOUS)

OSMANIA UNIVERSITY, HYDERABAD – 500 007.

No. 78 /Admin./UCE/2021

Date: 19-01-2021

CIRCULAR

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Sub: List of Recognised Swayam NPTEL courses for JAN- APRIL 2021 semester – Reg.

It is hereby informed to all the students, that the list of courses recognised by the respective Departments of UCE, OU from the list of courses offered by SWAYAM-NPTEL for the January – April 2021 semester is herewith enclosed and uploaded in the college website i.e. www.uceou.edu. Students who are pursuing their full time internship especially BE VIII Semester students, have to enroll for the subjects in Swayam NPTEL website <https://nptel.ac.in/index.html> from the above recognised course list given by the respective Departments, with prior permission from their respective Head of the Department. Credit transfer will be allowed only to those students (i.e. BE VIII Semester) who are pursuing their full-time internship in recognised companies and the subject/subjects they intend to enroll should not be studied by them in their previous semesters. Students are also advised to select a subject equivalent to their graduating degree i.e. UG/PG and they have to enroll for various courses under University College of Engineering, Osmania University Local chapter only for getting official recognition of the certificates. Also, it may be noted that there is no makeup or supplementary examination for Swayam NPTEL courses. All the Heads of the departments are requested to inform students to visit the college website for knowing the recognised course list and they may also display the recognised course list in their respective departments. The last date for registration for various NPTEL courses is for 4 weeks (Set 1), 8 weeks (Set 1) & 12 weeks course is 25-01-2021 and for 4 weeks (Set 2) & 8 weeks (Set 2) courses is 15-02-2021. Students are informed that the information provided here is only tentative and are advised to visit Swayam NPTEL website for exact information for various details like last date of enrolment for various courses, number of credits etc.


PRINCIPAL

PRINCIPAL

University College of Engineering
(Autonomous)
Osmania University, Hyderabad-500007

Copy:

1. The Dean, Faculty of Engineering, OU
2. The Vice-Principal, UCE(A), OU
3. All the Head of the Departments(BME/CIVIL/CSE/ECE/EEE/MED), UCE(A), OU
4. The Director of Evaluation, Examination Cell, UCE, OU
5. Dr. L. Siva Rama Krishna, SPOC, NPTEL Local Chapter, UCE, OU
6. Dr. J. Upender, Coordinator Swayam, Osmania University & PRO, UCE, OU

Department of Biomedical Engineering
University College of Engineering, Osmania University

List of Recognized SWAYAM - NPTEL Courses for January - April 2021 Semester

Course Id	Discipline	Course Name	Duration	Course Start Date	Course End Date	Course enrolment ends	Level (UG/PG)	Credits	Course Elective/ Core
noc21-bt05	Biotechnology and Bioengineering	Bioengineering: An Interface with Biology and Medicine	8 Weeks	18/01/2021	12/03/2021	25/01/2021	UG	2	Core
noc21-bt12	Biotechnology and Bioengineering	Biointerface Engineering	8 Weeks	18/01/2021	12/03/2021	25/01/2021	UG/PG	2	Elective
noc21-bt06	Biotechnology and Bioengineering	BioInformatics: Algorithms and Applications	12 Weeks	18/01/2021	09/04/2021	25/01/2021	UG/PG	3	Core
noc21-bt07	Biotechnology and Bioengineering	Biostatistics and Design of experiments	8 Weeks	18/01/2021	12/03/2021	25/01/2021	UG/PG	2	Core/Elective
noc21-bt09	Biotechnology and Bioengineering	Introductory Mathematical Methods for Biologists	8 Weeks	15/02/2021	09/04/2021	15/02/2021	UG/PG	2	Core
noc21-bt15	Biotechnology and Bioengineering	Optical Spectroscopy and Microscopy : Fundamentals of optical measurements and instrumentation	12 Weeks	18/01/2021	09/04/2021	25/01/2021	PG	3	Elective
noc21-cy15	Biotechnology and Bioengineering	Cell Biology: Cellular organization, division and processes	8 Weeks	15/02/2021	09/04/2021	15/02/2021	UG/PG	2	Core
noc21-hs02	Humanities and Social Sciences	Enhancing Soft Skills and Personality	8 Weeks	15/02/2021	09/04/2021	15/02/2021	UG/PG	2	Elective
noc21-hs05	Humanities and Social Sciences	Speaking Effectively	8 Weeks	18/01/2021	12/03/2021	25/01/2021	UG	2	Core
noc21-hs06	Humanities and Social Sciences	Employment Communication A Lab based course	8 Weeks	18/01/2021	12/03/2021	25/01/2021	UG	2	Core
noc21-hs07	Humanities and Social Sciences	Soft Skill Development	8 Weeks	18/01/2021	12/03/2021	25/01/2021	UG/PG	2	Elective
noc21-hs09	Humanities and Social Sciences	Health Research Fundamentals	8 Weeks	18/01/2021	12/03/2021	25/01/2021	UG	2	Elective
noc21-hs15	Humanities and Social Sciences	Patent Law for Engineers and Scientists	12 Weeks	18/01/2021	09/04/2021	25/01/2021	UG/PG	3	Elective
noc21-ge09	Multidisciplinary	Fundamental of Fluid Mechanics for Chemical and Biomedical Engineers	12 Weeks	18/01/2021	09/04/2021	25/01/2021	UG	3	Core
noc21-ge10	Multidisciplinary	Matlab Programming for Numerical Computation	8 Weeks	18/01/2021	12/03/2021	25/01/2021	UG/PG	2	Elective

Sd/-

Prof. M.Malini
HEAD, BME, UCE, OU

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19/1/21

**Department Of Civil Engineering,
University College of Engineering, Osmania University**
List of Recognized SWAYAM - NPTEL Courses for January - April 2021 Semester

Course Id	Discipline	Course Name	Duration	Course Start Date	Course End Date	Course enrolmen ends	Level (UG/PG)	Credits	Course Elective/ Core
noc21-ce01	Civil Engineering	Geotechnical Engineering II Foundation Engineering	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG	3	Core
noc21-ce03	Civil Engineering	Electronic Waste Management - Issues and Challenges	4 Weeks	January 18, 2021	February 12, 2021	January 25, 2021	PG	1	Elective
noc21-ce05	Civil Engineering	Architectural Conservation and Historic Preservation	8 Weeks	February 15, 2021	April 9, 2021	February 15, 2021	PG	2	Elective
noc21-ce06	Civil Engineering	Geosynthetics and Reinforced Soil Structures	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	PG	3	Elective
noc21-ce16	Civil Engineering	Safety in Construction	8 Weeks	February 15, 2021	April 9, 2021	February 15, 2021	UG/PG	2	Elective
noc21-ce17	Civil Engineering	Natural Hazards	8 Weeks	January 18, 2021	March 12, 2021	January 25, 2021	PG	2	Elective
noc21-ce19	Civil Engineering	Development and Applications of Special Concretes	8 Weeks	January 18, 2021	March 12, 2021	January 25, 2021	PG	2	Elective
noc21-ce20	Civil Engineering	Principles of Construction Management	8 Weeks	January 18, 2021	March 12, 2021	January 25, 2021	UG	2	Core
noc21-ce21	Civil Engineering	Construction methods and equipment management	8 Weeks	January 18, 2021	March 21, 2021	January 25, 2021	PG	2	Core
noc21-ce22	Civil Engineering	Scheduling Techniques in Projects	8 Weeks	January 18, 2021	March 21, 2021	January 25, 2021	UG	2	Elective
noc21-ce24	Civil Engineering	Introduction to Accounting and Finance for Civil Engineers	8 Weeks	January 18, 2021	January 18, 2021	January 25, 2021	UG/PG	2	Elective

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noc21-ce26	Civil Engineering	Soil Structure Interaction	12 weeks	January 18, 2021	January 18, 2021	January 25, 2021	UG/PG	3	Elective
noc21-ce33	Civil Engineering	Advanced Foundation Engineering	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Core/Elective
noc21-ce35	Civil Engineering	Urban Transportation Systems Planning	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	PG	3	Core
noc21-ce36	Civil Engineering	Environmental Remediation of Contaminated Sites	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Elective
noc21-hs08	Humanities and Social Sciences	Intellectual Property	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Elective
noc21-hs15	Humanities and Social Sciences	Patent Law for Engineers and Scientists	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Elective
noc21-hs16	Humanities and Social Sciences	English language for competitive exams	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Elective
noc21-ge04	Multidisciplinary	Non-Conventional Energy Resources	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Elective
noc21-ge07	Multidisciplinary	Fuzzy Logic and Neural Networks	8 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Elective
noc21-ge10	Multidisciplinary	Matlab Programming for Numerical Computation	8 Weeks	February 15, 2021	April 9, 2021	February 15, 2021	UG/PG	2	Elective
				February 15, 2021	April 9, 2021	January 25, 2021	UG/PG	2	Elective

NOTE:

1. The above courses are acceptable for students who are in full semester Internship only.
2. If any course is offered by Civil Engg Dept or Other Depts. with similar title and or syllabus with different title then it will not be considered for any credits transfer for those students who are not doing full internship.

Sd/-
Prof. M Anjaneya Prasad
HEAD

19/1/21

Updated Recognized course list – CSE in place of previous list. Students are requested to register the following subjects and ignore the previous list.

Professional Electives list

Course Id	Discipline	Course Name	Duration	Course Start Date	Course End Date	Course enrolment ends	Exam Date	Level (UG/PG)	Credits
noc21-cs46	CSE	GPU Architectures and Programming	12	Jan 18 th 2021	April 9 th 2021	January 25, 2021	April 25 th 2021	UG/PG	3
noc21-cs24	CSE	Introduction to Machine Learning	12	Jan 18 th 2021	April 9 th 2021	January 25, 2021	April 25 th 2021	UG/PG	3
noc21-cs05	CSE	Deep Learning-IITKGP	12	Jan 18 th 2021	April 9 th 2021	January 25, 2021	April 24 th 2021	UG/PG	3

OPEN ELECTIVE III

Course Id	Discipline	Course Name	Duration	Course Start Date	Course End Date	Course enrolment ends	Exam Date	Level (UG/PG)	Credits
Noc21-ee23	Electrical and Electronic Engineering	Computer vision and image processing-Fundamentals and Applications	12 weeks	Jan 18 th 2021	April 9 th 2021	January 25, 2021	April 24 th 2021	UG/PG	3
Noc21-ee33	Electrical and Electronic Engineering	Applied linear algebra for signal processing, Data analytics and Machine learning	12 Weeks	Jan 18 th 2021	April 9 th 2021	January 25, 2021	April 25 th 2021	UG/PG	3
Noc21-mg08	Management	Business analytics and data mining modelling using R	12 weeks	Jan 18 th 2021	April 9 th 2021	January 25, 2021	April 25 th 2021	UG/PG	3

**Department of Electronics and Communication Engineering
University College of Engineering, Osmania University**

List of Recognized SWAYAM - NPTEL Courses for January - April 2021 Semester

S.NO	Course ID	Discipline	Course name	Duration	Course Start Date	Course End Date	Course enrolment ends	Level (UG/PG)	Credits	Course Elective/Core
1	noc21-ee02	Electrical and Electronic Engineering	Principles of Signals and Systems	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG	3	Core
2	noc21-ee04		Mathematical Methods and Techniques in Signal Processing	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	PG	3	Elective
3	noc21-ee09		CMOS Digital VLSI Design	8 Weeks	January 18, 2021	March 12, 2021	January 25, 2021	UG/PG	2	Elective
4	noc21-ee11		Modern digital communication techniques	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG	3	Elective
5	Noc21-ee12		Evolution of Air Interface towards 5G	8 weeks	February 15, 2021	April 9, 2021	February 15, 2021	UG/PG	2	Elective
6	noc21-ee22		Digital IC Design	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG	3	Elective
7	noc21-ee23		Computer Vision and Image Processing - Fundamentals and Applications	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Elective
8	noc21-ee30		Principles of Digital Communications	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG	3	Elective
9	noc21-ee31		Integrated Circuits, MOSFETs, Op-Amps and their Applications	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Elective
10	noc21-ee33		Applied Linear Algebra for Signal Processing, Data Analytics and Machine Learning	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Core/Elective
11	noc21-ee34		Microwave Integrated Circuits	8 Weeks	January 18, 2021	March 12, 2021	January 25, 2021	UG/PG	2	Core
12	noc21-ee35		Photonic integrated circuit	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	PG	3	Elective
13	noc21-ee40		Optical Fiber Sensors	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Elective
14	noc21-ee42		Optical Communications	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG	3	Core/Elective
15	noc21-ee43		Electromagnetic Waves in Guided and Wireless Media	8 Weeks	February 15, 2021	April 9, 2021	February 1, 2021	UG/PG	2	Elective
16	noc21-ee47		Spread Spectrum Communications And Jamming	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Elective
17	noc21-ee49		Fuzzy Sets, Logic and Systems & Applications	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Elective
18	noc21-ee51		Analog Ic Design	12 Weeks	January 18, 2021	April 9, 2021	January 25, 2021	UG/PG	3	Elective

Sd/-

Prof. .B.Rajendra Naik
H E A D, ECE, UCE, OU

M
19/1/21

Department of Electrical & Electronics Engineering
University College of Engineering, Osmania University

List of Recognized SWAYAM - NPTEL Courses for January - April 2021 Semester

Course Id	Discipline	Course Name	Duration	Course Start Date	Course End Date	Course enrolment ends	Level (UG/PG)	Credits	Core/ Elective
noc21-ee29	Electrical and Electronics Engineering	High Power Multilevel Converters - Analysis, design and operational issues	12 weeks	18-01-2021	09-04-2021	01-02-2021	UG & PG	3	Core/ Elective
noc21-ee56	Electrical and Electronics Engineering	Power Quality Improvement Technique	8 weeks	18-01-2021	12-03-2021	01-02-2021	UG & PG	2	Elective
noc21-ee16	Electrical and Electronics Engineering	Power System Dynamics, Control and Monitoring	12 weeks	18-01-2021	09-04-2021	01-02-2021	UG & PG	3	Elective
noc21-ee48	Electrical and Electronics Engineering	Optimal control	8 weeks	18-01-2021	12-03-2021	01-02-2021	UG & PG	2	Elective
noc21-cs24	Computer Science and Engineering	Introduction to Machine Learning	12 weeks	18-01-2021	09-04-2021	01-02-2021	UG & PG	3	Elective
noc21-cs45	Computer Science and Engineering	Data Analytics with Python	12 weeks	18-01-2021	09-04-2021	01-02-2021	UG & PG	3	Elective
noc21-cs23	Computer Science and Engineering	Data Science for Engineers	8 weeks	18-01-2021	12-03-2021	01-02-2021	UG & PG	2	Elective

Sd/-
Prof. G. Mallesham
 H E A D, EEE, UCE, OU

(Signature)
 19/1/21

**Department of Mechanical Engineering
University College of Engineering, Osmania University**

List of Recognized SWAYAM - NPTEL Courses for January - April 2021 Semester

Course Id	Discipline	Course Name	Duration	Course Start Date	Course End Date	Course enrolment ends	Level (UG/PG)	Credits	Course Elective/ Core
noc21-me67	Mechanical Engineering	Industrial Automation and Control	12 Weeks	1/18/2021	4/9/2021	1/25/2021	UG/PG	3	Elective
noc21-me41	Mechanical Engineering	Nonlinear Vibration	12 Weeks	January 18, 2021	April 9, 2021	1/25/2021	UG/PG	3	Elective
noc21-me33	Mechanical Engineering	Muffler Acoustics – Application to Automotive Exhaust Noise Control	12 Weeks	January 18, 2021	April 9, 2021	1/25/2021	UG/PG	3	Elective
noc21-me03	Mechanical Engineering	Introduction to Mechanical Micro Machining	12 Weeks	January 18, 2021	April 9, 2021	1/25/2021	UG/PG	3	Elective
noc21-me02	Mechanical Engineering	Experimental Stress Analysis	12 Weeks	January 18, 2021	April 9, 2021	1/25/2021	UG/PG	3	Elective
noc21-me66	Mechanical Engineering	Product Design and Manufacturing	12 Weeks	January 18, 2021	April 9, 2021	1/25/2021	UG/PG	3	Elective
noc21-me34	Mechanical Engineering	Elements of Solar Energy Conversion	12 Weeks	January 18, 2021	April 9, 2021	1/25/2021	UG/PG	3	Elective
noc21-me37	Mechanical Engineering	Robotics: Basics and Selected Advanced Concepts	12 Weeks	January 18, 2021	April 9, 2021	1/25/2021	UG/PG	3	Elective
noc21-mg08	Management	Business analytics and data mining Modeling using R	12 Weeks	January 18, 2021	April 9, 2021	1/25/2021	UG/PG	3	Elective
noc21-mg16	Management	Business Analytics for Management Decision	12 Weeks	January 18, 2021	April 9, 2021	1/25/2021	UG/PG	3	Elective
noc21-mg02	Management	Data Analysis and Decision Making - I	12 Weeks	January 18, 2021	April 9, 2021	1/25/2021	UG/PG	3	Elective

Sd/-

Prof. P. Ramesh Babu
HEAD, MED, UCE, OU

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