

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERISTY ANANTAPUR**

**R20 B.Tech. List of SWAYAM Courses as Electives for Academic Year 2022-23**

**R20 B.Tech. III Year I Semester**

**Professional Elective– I**

S.No.	Discipline	Title of the Course	Duration	Link to access Course
1	Civil Engineering	Advanced Concrete Technology	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_ce58/preview">https://onlinecourses.nptel.ac.in/noc22_ce58/preview</a>
2	Civil Engineering	Earthquake Geology	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_ce87/preview">https://onlinecourses.nptel.ac.in/noc22_ce87/preview</a>
3	EEE	Control and Tuning Methods in Switched Mode Power Converters	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_ee100/preview">https://onlinecourses.nptel.ac.in/noc22_ee100/preview</a>
4	EEE	Power System Protection	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_ee101/preview">https://onlinecourses.nptel.ac.in/noc22_ee101/preview</a>
5	EEE	Linear Systems Theory	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_ee84/preview">https://onlinecourses.nptel.ac.in/noc22_ee84/preview</a>
6	Mechanical Engineering	Work system design	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_me133/preview">https://onlinecourses.nptel.ac.in/noc22_me133/preview</a>
7	Mechanical Engineering	Fundamentals of Additive Manufacturing Technologies	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_me122/preview">https://onlinecourses.nptel.ac.in/noc22_me122/preview</a>
8	Mechanical Engineering	Introduction To Composites	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_me87/preview">https://onlinecourses.nptel.ac.in/noc22_me87/preview</a>
9	Mechanical Engineering	Dynamics and Control of Mechanical Systems	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_me96/preview">https://onlinecourses.nptel.ac.in/noc22_me96/preview</a>
10	Mechanical Engineering	Design of Mechatronic Systems	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_me128/preview">https://onlinecourses.nptel.ac.in/noc22_me128/preview</a>
11	ECE	Introduction to Machine Learning	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_cs73/preview">https://onlinecourses.nptel.ac.in/noc22_cs73/preview</a>
12	ECE	Computer Architecture & Organization	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_cs88/preview">https://onlinecourses.nptel.ac.in/noc22_cs88/preview</a>
13	CSE	Software Project Management	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_cs107/preview">https://onlinecourses.nptel.ac.in/noc22_cs107/preview</a>
14	CSE	Digital Image Processing	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_ee116/preview">https://onlinecourses.nptel.ac.in/noc22_ee116/preview</a>
15	IT	Software Testing	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_cs61/preview">https://onlinecourses.nptel.ac.in/noc22_cs61/preview</a>
16	IT	Introduction to Internet of Things	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_cs96/preview">https://onlinecourses.nptel.ac.in/noc22_cs96/preview</a>
17	CSE (AI), CSE (AI&ML)	Data Analysis & Decision Making - III	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_mg59/preview">https://onlinecourses.nptel.ac.in/noc22_mg59/preview</a>
18	CSE (AI), CSE (AI & ML)	Social Networks	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_cs121/preview">https://onlinecourses.nptel.ac.in/noc22_cs121/preview</a>
19	CSE (AI), CSE (AI & ML)	Introduction to Robotics	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_de11/preview">https://onlinecourses.nptel.ac.in/noc22_de11/preview</a>
20	CSE (DS)	Database and Content Organization	15 weeks	<a href="https://onlinecourses.swyam2.ac.in/nou22_lb20/preview">https://onlinecourses.swyam2.ac.in/nou22_lb20/preview</a>
21	CSE (DS)	Data Analysis & Decision Making - III	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_mg59/preview">https://onlinecourses.nptel.ac.in/noc22_mg59/preview</a>
22	CSE (DS)	Programming in JAVA	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_cs102/preview">https://onlinecourses.nptel.ac.in/noc22_cs102/preview</a>

23	AI & DS	Social Networks	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_cs121/preview">https://onlinecourses.nptel.ac.in/noc22_cs121/preview</a>
24	AI & DS	Software engineering	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_cs106/preview">https://onlinecourses.nptel.ac.in/noc22_cs106/preview</a>
25	AI & DS	Android Mobile Application Development	12 weeks	<a href="https://onlinecourses.swyam2.ac.in/nou22_ge57/preview">https://onlinecourses.swyam2.ac.in/nou22_ge57/preview</a>
26	CSE (IoT)	Social Networks	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_cs121/preview">https://onlinecourses.nptel.ac.in/noc22_cs121/preview</a>
27	CSE (IoT)	Introduction to Industry 4.0 and Industrial Internet of Things	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_cs95/preview">https://onlinecourses.nptel.ac.in/noc22_cs95/preview</a>
28	CSE (IoT)	Introduction to Wireless and Cellular Networks	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_ee85/preview">https://onlinecourses.nptel.ac.in/noc22_ee85/preview</a>
29	Food Technology	Dairy Food process and Products technology	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_ag06/preview">https://onlinecourses.nptel.ac.in/noc22_ag06/preview</a>
30	Food Technology	Food Fortification	12 weeks	<a href="https://onlinecourses.swyam2.ac.in/aic22_ge05/preview">https://onlinecourses.swyam2.ac.in/aic22_ge05/preview</a>
31	Food Technology	Food Preservation Technology	12 weeks	<a href="https://onlinecourses.swyam2.ac.in/cec22_ag12/preview">https://onlinecourses.swyam2.ac.in/cec22_ag12/preview</a>
32	Food Technology	Institutional food Service Management	12 weeks	<a href="https://onlinecourses.swyam2.ac.in/cec22_ag07/preview">https://onlinecourses.swyam2.ac.in/cec22_ag07/preview</a>

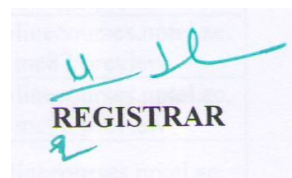
#### Open Elective – I

S.No.	Offered by the Discipline	Title of the Course	Duration	Link to access Course
1	Civil Engineering	Wastewater Treatment and Recycling	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_ce76/preview">https://onlinecourses.nptel.ac.in/noc22_ce76/preview</a>
2	EEE	Electricity & Safety Measures	12 weeks	<a href="https://onlinecourses.swyam2.ac.in/nou22_ec05/preview">https://onlinecourses.swyam2.ac.in/nou22_ec05/preview</a>
3	EEE	Principle of Electrical Sciences	12 weeks	<a href="https://onlinecourses.swyam2.ac.in/nou22_ec03/preview">https://onlinecourses.swyam2.ac.in/nou22_ec03/preview</a>
4	Mechanical Engineering	Quality Engineering & Management	12 weeks	<a href="https://onlinecourses.swyam2.ac.in/nou22_me11/preview">https://onlinecourses.swyam2.ac.in/nou22_me11/preview</a>
5	ECE	Digital Circuits	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_ee110/preview">https://onlinecourses.nptel.ac.in/noc22_ee110/preview</a>
6	CSE, IT, CSE (AI), CSE (AI & ML), CSE(DS), AI &DS, CSE (IOT)	Programming In Java	12 weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_cs102/preview">https://onlinecourses.nptel.ac.in/noc22_cs102/preview</a>
7	CSE, IT, CSE (AI), CSE (AI & ML), CSE(DS), AI &DS, CSE (IOT)	Introduction to Machine Learning	12 Weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_cs73/preview">https://onlinecourses.nptel.ac.in/noc22_cs73/preview</a>
8	CSE, IT, CSE (AI), CSE (AI & ML), CSE(DS), AI &DS, CSE (IOT)	Android Mobile Application Development	12 Weeks	<a href="https://onlinecourses.swyam2.ac.in/nou22_ge57/preview">https://onlinecourses.swyam2.ac.in/nou22_ge57/preview</a>

9	Food Technology	Food and Nutrition	12 Weeks	<a href="https://onlinecourses.swayam2.ac.in/cec22_ag09/preview">https://onlinecourses.swayam2.ac.in/cec22_ag09/preview</a>
10	Food Technology	Food Chemistry	12 Weeks	<a href="https://onlinecourses.swayam2.ac.in/cec22_ag10/preview">https://onlinecourses.swayam2.ac.in/cec22_ag10/preview</a>
11	Sciences & Humanities	Physics of Renewable Energy Systems	12 Weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_ph44">https://onlinecourses.nptel.ac.in/noc22_ph44</a>
12		Public Speaking	12 Weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_hs134/preview">https://onlinecourses.nptel.ac.in/noc22_hs134/preview</a>
13		Essential Mathematics for Machine Learning	12 Weeks	<a href="https://onlinecourses.nptel.ac.in/noc22_ma40/preview">https://onlinecourses.nptel.ac.in/noc22_ma40/preview</a>

**Note:**

1. A student is permitted to opt for any Open Elective Course other than open elective offered by his/her own department.
2. A student shall not be permitted to take courses as Professional / Open Elective with content substantially equivalent to the courses offered through the curriculum as it may otherwise lead to duplication and repetition of the same course



REGISTRAR

**Date: 12-07-2022**