

SWAYAM Courses for July Dec 2020 Semester for Biological Sciences, Bioengineering & Chemical Engineering

S.No.	Name of Course	Offered by	Name of Faculty	No. of weeks	URL
1	Plant Group	CEC	Dr. Anrup Kumar Mitra	12	https://www.swayam.gov.in/nd2_cec20_bt11/preview
2	Analytical Techniques	CEC	Prof. M. R. Rejeswari	15	https://www.swayam.gov.in/nd2_cec20_bt22/preview
3	Animal Physiology	NPTEL	Prof. Mainak Das	12	https://www.swayam.gov.in/nd1_noc20_bt42/preview
4	Biochemistry of Biomolecules	CEC	Dr. Sudeshna Shyam Choudhury	12	https://www.swayam.gov.in/nd2_cec20_bt12/preview
5	Biomedical Nanotechnology	NPTEL	Prof. G.P. Gopinath	4	https://www.swayam.gov.in/nd1_noc20_bt29/preview
6	Biomicrofluidics	NPTEL	Prof. Tapas Kumar Maiti, Prof. Suman Chakraborty	4	https://www.swayam.gov.in/nd1_noc20_bt22/preview
7	Bioreactors	NPTEL	Prof. Suraishkumar G K	4	https://www.swayam.gov.in/nd1_noc20_bt26/preview
8	Biostatistics and Mathematical Biology	CEC	Dr. Felix Bast	12	https://www.swayam.gov.in/nd2_cec20_bt23/preview
9	Cell Designer- modeling tool for gene-regulatory and biochemical networks	AICTE	Prof. Kannan Moudgalya	4	https://www.swayam.gov.in/nd2_aic20_sp58/preview
10	Chemical Engineering Thermodynamics	NPTEL	Prof. Jayant K. Singh	12	https://www.swayam.gov.in/nd1_noc20_ch34/preview
11	Chemical Process Control	NPTEL	Prof. Sujit Jogwar	8	https://www.swayam.gov.in/nd1_noc20_ch28/preview

12	Chemical Process Intensification	NPTEL	Prof. Subrata Kumar Majumdar	12	https://www.swayam.gov.in/nd1_noc20_ch40/preview
13	Chemical Process Safety	NPTEL	Prof. Shishir Sinha	12	https://www.swayam.gov.in/nd1_noc20_ch38/preview
14	Chemical Reaction Engineering-I	NPTEL	Prof. Bishnupada Mandal	12	https://www.swayam.gov.in/nd1_noc20_ch25/preview
15	Colloids and surfaces	NPTEL	Prof. Basavaraju	8	https://www.swayam.gov.in/nd1_noc20_ch36/preview
16	Computer Aided Drug Design	NPTEL	Prof. Mukesh Doble	8	https://www.swayam.gov.in/nd1_noc20_bt23/preview
17	DWSIM	AICTE	Prof. Kannan Moudgalya	12	https://www.swayam.gov.in/nd2_aic20_sp08/preview
18	Drug Delivery: Principles and Engineering	NPTEL	Prof. Rachit Agarwal	12	https://www.swayam.gov.in/nd1_noc20_bt24/preview
19	Endocrinology	CEC	Dr. Manzoor Ahmad Mir	12	https://www.swayam.gov.in/nd2_cec20_bt21/preview
20	Enzymology	CEC	Dr. Bashir Ahmad Ganai	12	https://www.swayam.gov.in/nd2_cec20_bt20/preview
21	Experimental Biotechnology	NPTEL	Prof. Vishal Trivedi	12	https://www.swayam.gov.in/nd1_noc20_bt31/preview
22	Fluid and Particle Mechanics	NPTEL	Prof. Basavaraju, Prof. Sumesh	12	https://www.swayam.gov.in/nd1_noc20_ch33/preview
23	Fluidization Engineering	NPTEL	Prof. Subrata Kumar Majumdar	12	https://www.swayam.gov.in/nd1_noc20_ch26/preview
24	Functional Genomics	NPTEL	Prof. S. Ganesh	4	https://www.swayam.gov.in/nd1_noc20_bt40/preview

25	Fundamentals of micro and nanofabrication	NPTEL	Prof. Shankar Selvaraja, Prof. Sushobhan avasthi	12	https://www.swayam.gov.in/nd1_noc20_bt37/preview
26	Genetic Engineering: Theory and Application	NPTEL	Prof. Vishal Trivedi	12	https://www.swayam.gov.in/nd1_noc20_bt32/preview
27	Heat Transfer	NPTEL	Prof. Sunando DasGupta	12	https://www.swayam.gov.in/nd1_noc20_ch21/preview
28	Human Genetics	CEC	Prof. N.B. Ramachandra	12	https://www.swayam.gov.in/nd2_cec20_bt17/preview
29	Image Signal Processing	NPTEL	Prof. A.N. Rajagopalan	12	https://www.swayam.gov.in/nd1_noc20_ee83/preview
30	Immunology	NPTEL	Prof. Sudip Kumar Ghosh, Prof. Agneyo Ganguly	12	https://www.swayam.gov.in/nd1_noc20_bt43/preview
31	Industrial Biotechnology	NPTEL	Prof. Debabrata Das	12	https://www.swayam.gov.in/nd1_noc20_bt21/preview
32	Infrared spectroscopy for pollution monitoring	NPTEL	Prof. J.R. Mudakavi	4	https://www.swayam.gov.in/nd1_noc20_ch23/preview
33	Introduction to Proteomics	NPTEL	Prof. Sanjeeva Srivastava	8	https://www.swayam.gov.in/nd1_noc20_bt20/preview
34	Introduction to Biostatistics	NPTEL	Prof. Shamik Sen	8	https://www.swayam.gov.in/nd1_noc20_bt28/preview
35	Introduction to Developmental Biology	NPTEL	Prof. Subramaniam K	12	https://www.swayam.gov.in/nd1_noc20_bt35/preview

36	Introduction to Polymer Physics	NPTEL	Prof. Amit Kumar	8	https://www.swayam.gov.in/nd1_noc20_ch30/preview
37	Scalable Data SciIntroduction to Proteogenomicsence	NPTEL	Prof. Sanjeeva Srivastava	12	https://www.swayam.gov.in/nd1_noc20_bt19/preview
38	Introduction to mechanobiology	NPTEL	Prof. Shamik Sen	8	https://www.swayam.gov.in/nd1_noc20_bt27/preview
39	Mechanical Operation	NPTEL	Prof. Shabina Khanam	4	https://www.swayam.gov.in/nd1_noc20_ch39/preview
40	Mechanical Unit Operations	NPTEL	Prof. Nanda Kishore	12	https://www.swayam.gov.in/nd1_noc20_ch27/preview
41	Microbial Physiology and metabolism	CEC	Dr. Raghavendra M.P.	12	https://www.swayam.gov.in/nd2_cec20_bt14/preview
42	Nanotechnology in agriculture	NPTEL	Prof. Mainak Das	8	https://www.swayam.gov.in/nd1_noc20_bt41/preview
43	Natural Gas Engineering	NPTEL	Prof. Pankaj Tiwari	8	https://www.swayam.gov.in/nd1_noc20_ch24/preview
44	OpenModelica	AICTE	Prof. Kannan Moudgalya	6	https://www.swayam.gov.in/nd2_aic20_sp30/preview
45	Plant Pathology and Soil Health	CEC	Dr. Vindhya K	12	https://www.swayam.gov.in/nd2_cec20_bt13/preview
46	Phase equilibrium thermodynamics	NPTEL	Prof. Gargi Das	8	https://www.swayam.gov.in/nd1_noc20_ch22/preview
47	Physiology and Biochemistry	CEC	Dr. Ramtej J. Verma	12	https://www.swayam.gov.in/nd2_cec20_bt19/preview
48	Plant Cell Bioprocessing	NPTEL	Prof. Smita Srivastava	8	https://www.swayam.gov.in/nd1_noc20_bt34/preview

49	Plant Design and Economics	NPTEL	Prof. Debasis Sarkar	12	https://www.swayam.gov.in/nd1_noc20_ch31/preview
50	Plant Developmental Biology	NPTEL	Prof. Shri Ram Yadav	4	https://www.swayam.gov.in/nd1_noc20_bt36/preview
51	Polymers: concepts, properties, uses and sustainability	NPTEL	Prof. Abhijit P Deshpande	12	https://www.swayam.gov.in/nd1_noc20_ch41/preview
52	Principles of Downstream techniques in bioprocess	NPTEL	Prof. Mukesh Doble	12	https://www.swayam.gov.in/nd1_noc20_bt25/preview
53	Sustainable Management of biodiversity	IGNOU	Dr. Shachi Shah	12	https://www.swayam.gov.in/nd2_nou20_bt02/preview
54	Technologies for Clean and Renewable Energy Production	NPTEL	Prof. P. Mondal	8	https://www.swayam.gov.in/nd1_noc20_ch37/preview
55	Thermodynamics of Fluid Phase Equilibria	NPTEL	Prof. Jayant K. Singh	8	https://www.swayam.gov.in/nd1_noc20_ch35/preview
56	Tissue Engineering	NPTEL	Prof. Vignesh Muthuvijayan	8	https://www.swayam.gov.in/nd1_noc20_bt33/preview
57	Transport phenomena in Biological Systems	NPTEL	Prof. Suraishkumar G K	12	https://www.swayam.gov.in/nd1_noc20_bt30/preview
58	Unit operations of particulate matter	NPTEL	Prof. Shabina Khanam	4	https://www.swayam.gov.in/nd1_noc20_ch29/preview
59	Virology	CEC	Dr. Raghavendra M.P.	12	https://www.swayam.gov.in/nd2_cec20_bt15/preview
60	Wildlife Conservation	NPTEL	Prof. Ankur Awadhiya	8	https://www.swayam.gov.in/nd1_noc20_bt39/preview

61	Wildlife Ecology	NPTEL	Prof. Ankur Awadhiya	12	https://www.swayam.gov.in/nd1_noc20_bt38/preview
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