



**CHAITANYA BHARATHI
INSTITUTE OF TECHNOLOGY**

An Autonomous Institute | Affiliated to Osmania University
Kokapet Village, Gandipet Mandal, Hyderabad, Telangana-500075, www.cbti.ac.in



COMMITTED TO
RESEARCH,
INNOVATION AND
EDUCATION

45
years

Department of Biotechnology NPTEL/SWAYAM Courses for Honours Degree in Biotechnology

S.No	Course	Duration	Credits	Click here to join the course
1	Introduction to mechanobiology	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc21_bt31/preview
2	Introduction to Dynamical Models in Biology	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc21_bt42/preview
3	Conservation Geography	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc21_bt44/preview
4	Wildlife Ecology	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc21_bt45/preview
5	Organic Chemistry in Biology and Drug Development	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc21_cy30/preview
6	Legal and Regulatory Issues in Biotechnology	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc21_lw04/preview
7	Nanomaterials and their Properties	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc21_mm38/preview
8	Ecology and Environment	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc21_ge16/preview
9	Bioreactors	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc21_bt28/preview
10	Transport Phenomena in Biological Systems	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc21_bt40/preview
11	Technologies For Clean And Renewable Energy Production	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc21_ch42/preview
12	Principles and Practices of	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc21_ch52/preview

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	Process Equipment and Plant Design			
13	Patent Law for Engineers and Scientists	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc21_hs71/preview
14	Biomicrofluidics	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc21_bt24/preview
15	Biomedical nanotechnology	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc21_bt30/preview
16	Introduction to Biomedical Imaging Systems	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc21_bt50/preview
17	Biomechanics of Joints and Orthopaedic Implants	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc21_me130/preview
18	Neuroscience of Human Movements	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc21_ge17/preview
19	Current regulatory requirements for conducting clinical trials in India for investigational new drugs/new drug (Version 3.0)	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc21_ge25/preview
20	Introduction to Proteogenomics	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc21_bt25/preview
21	Introduction to proteomics	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc21_bt26/preview
22	Computer Aided Drug Design	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc21_bt29/preview
23	Drug Delivery: Principles and Engineering	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc21_bt37/preview
24	Functional Genomics	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc21_bt39/preview
25	Maternal Infant Young Child Nutrition	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc22bt01/preview
26	Optical Spectroscopy and Microscopy: Fundamentals of optical	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc22bt05/preview

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	measurements and instrumentation			
27	Human Molecular Genetics	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc22bt07/preview
28	Demystifying The Brain	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc22bt14/preview
29	Medical Biomaterials	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc22bt15/preview
30	Forests And Their Management	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc22bt24/preview
31	Nanotechnology In Agriculture	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc22bt25/preview
32	Bioelectrochemistry	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc22bt26/preview
33	Plant Developmental Biology	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc22bt27/preview
34	Conservation Economics	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc22bt31/preview
35	Soft Nano Technology	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc22ch11/preview
36	Understanding Design	4 Weeks	1	https://onlinecourses.nptel.ac.in/noc22de01/preview
37	Design, Technology and Innovation	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc22de05/preview
38	Emotional Intelligence	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc22hs11/preview
39	Exploring Survey Data on Health Care	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc22hs40/preview
40	Material and Energy Balances	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc22bt04/preview
41	Bioreactor Design and Analysis	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc22bt19/preview
42	Waste to Energy Conversion	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc22ch05/preview
43	Physico-chemical processes for wastewater treatment	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc22ch25/preview
44	Renewable Energy Engineering:	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc22ch27/preview

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	Solar, Wind and Biomass Energy Systems			
45	Biomass Conversion and Biorefinery	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc22ch28/preview
46	Environmental Quality Monitoring & Analysis	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc22ch33/preview
47	Bio photonics	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc22ee59/preview
48	Introduction to Environmental Engineering and Science - Fundamental and Sustainability Concepts	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc22ge06/preview
49	Computational Systems Biology	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc22bt03/preview
50	Interactomics: Basics & Applications	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc22bt11/preview
51	Data Analysis for Biologists	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc22bt20/preview
52	Biointerface Engineering	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc22bt21/preview
53	RNA Biology	12 Weeks	3	https://nptel.ac.in/courses/102106097
54	Biomechanics	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc24_bt06/preview https://nptel.ac.in/courses/102106098
55	Enzyme Sciences and Technology	12 Weeks	3	https://nptel.ac.in/courses/102103097
56	Metabolic Engineering	8 Weeks	2	https://nptel.ac.in/courses/102105086
57	Aspects Of Biochemical Engineering	12 Weeks	3	https://nptel.ac.in/courses/102105064
58	Introduction to Professional Scientific Communication	4 Weeks	1	https://nptel.ac.in/courses/102104061
59	Bioengineering: An Interface with	8 Weeks	2	https://nptel.ac.in/courses/102101068

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	Biology and Medicine			
60	Interactomics : Basics & Applications	12 Weeks	3	https://nptel.ac.in/courses/102101082
61	Structural Biology	12 Weeks	3	https://nptel.ac.in/courses/102107086
62	Cellular Biophysics: A Framework For Quantitative Biology	8 weeks	2	https://onlinecourses.nptel.ac.in/noc22_bt32/preview
63	Environmental Biotechnology (being offered as Elective in our R20 curriculum)	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc23_bt60/preview
64	Industrial Biotechnology (being offered as Elective in our R20 curriculum)	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc23_bt61/preview
65	Introduction To Biostatistics	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc23_bt58/preview
66	Medical Image Analysis	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc23_bt40/preview
67	Introduction To Developmental Biology (being offered as Elective in our R20 curriculum)	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc23_bt43/preview
68	Tissue Engineering (being offered as Elective in our R20 curriculum)	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc23_bt46/preview
69	Organ Printing	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc23_bt49/preview
70	Genome Editing And Engineering	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc23_bt51/preview
71	Next Generation Sequencing Technologies : Data Analysis And Applications	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc23_bt34/preview

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72	Computational Neuroscience	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc23_bt64/preview
73	Neurobiology	4 weeks	1	https://onlinecourses.nptel.ac.in/noc23_bt65/preview
74	Neural Science for Engineers	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc24_ee01/preview
75	Classics in Neuroscience	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc24_bt38/preview
76	Human Behaviour	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc24_hs35/preview
77	Biointerface Engineering	8 Weeks	2	https://onlinecourses.nptel.ac.in/noc24_bt16/preview
78	Microsensors, Implantable Devices and Rodent Surgeries for Biomedical Applications	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc24_bt37/preview
79	Education for Sustainable Development	12 Weeks	3	https://onlinecourses.nptel.ac.in/noc24_hs04/preview

Note: Those who have completed the courses in the previous semesters which are mentioned in the above list are not eligible to do the same in the present Semester.

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