



Dr. D. Y. Patil Educational Federation's
Dr. D. Y. Patil College of Engineering and Innovation
APPROVED BY AICTE, RECOGNIZED BY GOVT. OF MAHARASHTRA,
AUTONOMOUS INSTITUTE AFFILIATED TO SAVITRIBAI PHULE PUNE UNIVERSITY
Accredited by NAAC with "A" Grade



DETAILED SYLLABUS

Open Elective – II

Common to all

BTech 4 YEAR UG COURSE

(Applicable for the batches admitted from AY 2025-2026 at FY)

Dr. D. Y. Patil College of Engineering & Innovation

Survey No. 27/A/1/2C, Varale Campus,

Near Talegaon Railway Station,

Tal. Maval, Dist. Pune 410 507,

Ph: 020 48522561, 565,566

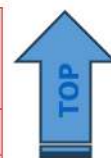
Web Site: <https://www.dypcoei.edu.in>,

Email: principal.dypcoei@dypatilef.com

Open Elective – II Common to all (Semester –III)

Open Elective -II (ILOEC202W)	
ILOEC202W-1	MOOC - I
ILOEC202W-2	Foreign Language - I
ILOEC202W-3	Universal Human Values
ILOEC202W-4	Sustainable Development and Employability Skills

**Open Elective – II
Second Year Syllabus
(Semester –III)**



Second Year (2025 Course) Open Elective- II MOOC-I			
Course Code	ILOEC202W-1	Credit	02
Contact Hours	TH: 02 Hrs./Weeks (L)	Type of Course	Theory
Examination Scheme	TW: 25 Marks	Total Marks	25

Pre-requisites:**Course assessment methods/tools:**

Sr. No.	Course assessment methods/ tools	External/ Internal	Marks
1.	Teamwork	Internal	25*

Course Objectives

1	To promote interactive user forums to support community interactions among students, professors, and experts
2	To promote learn additional skills anytime and anywhere.
3	To enhance teaching and learning on campus and online

Course Outcomes

CO1	To acquire additional knowledge and skill.
CO2	Explore new areas of interest in a relevant field

Topics covered:

MOOCs (Massive Open Online Courses) provide affordable and flexible ways to learn new skills, pursue lifelong interests and deliver quality educational experiences at scale. Whether you're interested in learning for yourself, advancing your career or leveraging online courses to educate your workforce, SWAYAM, NPTEL, edx, Coursera or similar ones can help. World's largest SWAYAM MOOCs, a new paradigm of education for anyone, anywhere, anytime, as per your convenience, aimed to provide digital education free of cost and to facilitate hosting of all the interactive courses prepared by the best more than 1000 specially chosen faculty and teachers in the country. SWAYAM MOOCs enhance active learning for improving lifelong learning skills by providing easy access to global resources. SWAYAM is a programme initiated by the Government of India and designed to

achieve the three cardinal principles of Education Policy viz., access, equity and quality. The objective of this effort is to take the best teaching learning resources to all, including the most disadvantaged. SWAYAM seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. More than 1,000 specially chosen faculty and teachers from across the Country have participated in preparing these courses. The courses hosted on SWAYAM are generally in 4 quadrants – (1) video lecture, (2) specially prepared reading material that can be downloaded/printed (3) self-assessment tests through tests and quizzes and (4) an online discussion forum for clearing the doubts. Steps have been taken to enrich the learning experience by using audio-video and multimedia and state of the art pedagogy / technology. In order to ensure best quality content is produced and delivered, seven National Coordinators have been appointed: They are NPTEL for engineering and UGC for post graduation education. Guidelines: Instructors are requested to promote students to opt for courses (not opted earlier) with proper mentoring. The departments will take care of providing necessary infrastructural and facilities for the learners.

Guidelines for Conduction and Assessment (Any one or more of following but not limited to):

1	Lectures/ Guest Lectures
2	Visits (Social/Field) and reports
3	Surveys
4	Mini-Project
5	Hands on experience on focused topic

List of NPTEL Courses (4 Week) to be opted

Sr. No.	Course ID	Course Name and Course Link	Institute	Start date
1	noc26-hs147	Water, Society and Sustainability https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_hs147	IIT Kharagpur	Jul 20, 2026
2	noc26-hs149	Patent Drafting for Beginners	IIT Madras	Jul 20, 2026

		https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_hs149		
3	noc26-hs234	Urban Sociology https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_hs234	IIT Kharagpur	Aug 17, 2026
4	noc26-hs144	Business Japanese and Business Manner https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_hs144	IIT Kanpur, University of Tokyo	Jul 20, 2026
5	noc26-cs105	Demystifying Networking https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_cs105	IIT Bombay	Jul 20, 2026
6	noc26-cs186	Mobile Virtual Reality and Artificial Intelligence https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_cs186	IIT Mandi	Aug 17, 2026
7	noc26-hs233	Sociology and Resource Management https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_hs233	IIT Kharagpur	Aug 17, 2026
8	noc26-hs148	Managing Intellectual Property in Universities https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_hs148	IIT Madras	Jul 20, 2026
9	noc26-mg142	Business and Sustainable Development https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_mg142	IIT Bombay	Aug 17, 2026
10	noc26-mg139	Digital Marketing in the AI era - Part 1 https://onlinecourses.nptel.ac.in/e-learning/preview/noc26_mg139	IIT Madras	Aug 17, 2026

List of Coursera Courses to be opted

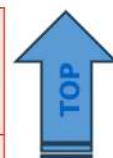
[Artificial Intelligence for Healthcare](#): SkillUp

[Artificial Intelligence for Marketing](#): Madecraft

[Artificial Intelligence in Finance and Wealth Management](#): University of Illinois Urbana-Champaign

CO-PO Mapping Table:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO1	-	-	-	-	-	-	-	-	2	3	-
CO2	-	-	-	-	-	-	-	-	-	3	-



Second Year (2025 Course)			
Open Elective- II Foreign Language - I			
Course Code	ILOEC202W-2	Credit	02
Contact Hours	TH: 02 Hrs./Weeks(L)	Type of Course	Theory
Examination Scheme	TW: 25 Marks	Total Marks	25

Pre-requisites:**Course assessment methods/tools:**

Sr. No.	Course assessment methods/ tools	External/ Internal	Marks
1.	Teamwork	Internal	25*

Course Objectives

1	To meet the needs of ever-growing industry with respect to language support.
2	To get introduced to Japanese society and culture through language.

Course Outcomes

CO1	To ability of basic communication.
CO2	To knowledge of Japanese script.
CO3	To introduced to reading, writing and listening skills
CO4	To develop interest to pursue professional Japanese Language course.

Topics covered:**Foreign Language (Japanese) Module 1 (15 Hrs.)**

1. Introduction to Japanese Language. Hiragana basic Script, colors, Days of the week
2. Hiragana: modified Kana, double consonant, Letters combined with ya, yu, yoLong vowels, Greetings and expressions.
3. Self-Introduction, Introducing other person, Numbers, Months, Dates, Telephone numbers, Stating on'sage.

Foreign Language (Japanese) Module 2**(15 Hrs.)**

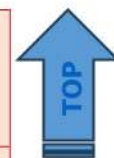
1. Katakana basic Script, Denoting things (nominal and pre nominal demonstratives), Purchasing at the Market / in a shop / mall (asking and stating price)
2. Katakana: Modified kana, double consonant, letters with ya, yu, yo, long vowels, describing time, describing starting and finishing time (kara ~ made), Point in time.
3. Means of transport (Vehicles), Places, Countries, Stating Birth date, Indicating movement to a certain place by a vehicle.

Text Books

1	Minna No Nihongo, "Japanese for Everyone", Elementary Main Text book1-1 (Indian Edition), Goyal Publishers and Distributors Pvt.Ltd.
2	http://www.tcs.com (http://www.tcs.com/news_events/press_releases/Pages/TCS-Inaugurates-Japan-centric-Delivery-Center-Pune.aspx).

CO-PO Mapping Table:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO1	-	-	-	-	-	-	-	-	2	3	-
CO2	-	-	-	-	-	-	-	-	-	3	-
CO3	-	-	-	-	-	-	-	-	1	3	-
CO4	-	-	-	-	-	-	-	-	-	2	-



Second Year Computer Engineering (2025 Course)

Open Elective – II Universal Human Values

Course Code	ILOEC202W-3	Credit	02
Contact Hours	02 Hrs/weeks(L)	Type of Course	Theory
Examination Scheme	Term Work: 25 marks	Total Marks	25

Pre-requisites:

- Basic knowledge of the selected domain
- Digital literacy and internet access
- Self-learning and time management skills

Course assessment methods/tools:

Sr. No.	Course assessment methods/ tools	External/ Internal	Marks
1.	Teamwork	Internal	25*

Course Objectives

1	To help students understand the importance of human values in personal and professional life
2	To enable self-exploration and development of a value-based lifestyle
3	To promote harmony at individual, family, society, and nature levels
4	To build ethical competence in engineering practice
5	To develop professional ethics

Course Outcomes

CO1	Understand the importance of human values and self-exploration
CO2	Analyze harmony at individual and interpersonal levels
CO3	Apply values in family and societal relationships
CO4	Evaluate environmental and societal responsibilities
CO5	Demonstrate ethical practices in professional life

Topics covered:

UNIT-I:	Introduction to Human Values	(6 Hrs.)
----------------	-------------------------------------	-----------------

Need, basic guidelines, and content of value education, Self-exploration: what is it? Continuous happiness and prosperity – basic human aspirations Right, understanding vs. preconditioning and sensations, Process of self-exploration.

Case Study: The Smartphone Upgrade Decision.

UNIT-II: Understanding Harmony in the Human Being (6 Hrs.)

Human being as coexistence of self (I) and body, Needs of self (happiness) and body (physical facilities), Correct appraisal of physical needs, Understanding harmony in the self, Role of education in developing right understanding.

Case Study: Health vs Career Pressure.

UNIT-III: Understanding Harmony in the Family and Society (6 Hrs.)

Harmony in family: trust, respect, affection, care, guidance, Justice (nine universal values in relationships), Harmony in society: from family to world family, Undivided society (Akhand Samaj), Universal human order (Sarvabhaum Vyavastha).

Case Study: Family Conflict Over Career Choice.

UNIT-IV: Understanding Harmony in Nature and Existence (6 Hrs.)

Interconnectedness of all systems in nature, Four orders in nature: Material order, Plant (bio) order, Animal order, Human order, Mutual fulfillment and coexistence, Environmental sustainability.

Case Study: Plastic Use and Environmental Impact.

UNIT-V: Implications of Human Values in Professional Ethics (6 Hrs.)

Ethical human conduct, Value-based living in personal and professional life, Holistic technologies and production systems, Social responsibility of engineers, Case studies on ethical dilemmas in engineering.

Case Study: Data Privacy vs Company Profit.

Text Books

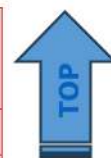
- | | |
|---|--|
| 1 | A Foundation Course in Human Values and Professional Ethics, R.R. Gaur, R. Asthana, G.P. Bagaria, Excel Books Pvt. Ltd., New Delhi, ISBN: 978-9391958411 |
| 2 | Universal Human Values, Dr. C.S.G. Krishnamacharyulu, Dr. Lalitha Ramakrishnan, Himalaya Publishing House, ISBN: 978-93-5596-076-4 |

Reference Books

1	Universal Human Values And Professional Ethics, Paperback Dr. Archana Chaudhary, ISBN: 978-9355156785
2	A Foundation Course in Human Values and Professional Ethics, Paperback, by R.R. Gaur (Author), R. Sangal (Author), G.P. Bagaria (Author),

CO-PO Mapping Table:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C01	–	1	–	–	–	1	2	–	–	–	2
C02	–	2	–	–	–	2	2	1	–	–	2
C03	–	1	1	–	–	2	3	2	1	–	1
C04	–	2	1	–	–	3	2	–	–	–	1
C05	–	1	1	–	–	2	3	2	2	1	2



Second Year (2025 Course)			
Open Elective- II Sustainable Development and Employability Skills			
Course Code	ILOEC202W-4	Credit	02
Contact Hours	TH: 02 Hrs./Weeks (L)	Type of Course	Theory
Examination Scheme	TW: 25 Marks	Total Marks	25

Pre-requisites:

Course assessment methods/tools:

Sr. No.	Course assessment methods/ tools	External/ Internal	Marks
1.	Teamwork	Internal	25*

Course Objectives

1	To promote interactive user forums to support community interactions among students, professors, and experts
2	To promote learn additional skills anytime and anywhere.
3	To enhance teaching and learning on campus and online

Course Outcomes

C01	To acquire additional knowledge and skill.
C02	Explore new areas of interest in a relevant field

List of LinkedIn Learning Courses:

Sr. No.	Course Title	Duration (HH.MM.SS)	LinkedIn Learning Link
1	Sustainability Foundations: Core Concepts	0.53.31	Open Course
2	Sustainability Strategies	0.46.55	Open Course
3	Sustainable Development and Well-Being	0.37.15	Open Course
4	How Tech Drives Sustainability	0.38.23	Open Course
5	The Employee's Guide to Sustainability	0.50.46	Open Course
6	The Business Sector and the Sustainable Development Goals	0.37.33	Open Course

7	Navigating Environmental Sustainability: A Guide for Leaders	0.16.57	Open Course
8	Leveraging AI and Data Engineering for Sustainable Solutions	0.57.17	Open Course
9	Climate Justice and Sustainable Business Practices	0.29.39	Open Course
10	Sustainable Development Goals (SDG): Tech Solutions	0.52.44	Open Course

List of BMS - ES Courses:

Sr. No.	Course Title	Duration (HH.MM.SS)	BMS - ES Link
1	Employability Skills	13:06.00	Open Course

CO-PO Mapping Table:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO1	-	-	-	-	-	-	-	-	2	3	-
CO2	-	-	-	-	-	-	-	-	-	3	-