ODISHA UNIVERSITY OF TECHNOLOGY AND RESEARCH

Techno Campus, Mahalaxmi Vihar, Ghatikia, Bhubaneswar-751029.

Syllabus Structure (Effective from 2023-24)

School/ Department: School of Infrastructure and Planning
Course: M. Plan., Programme: Urban and Regional Planning (URP),
Duration: 2 years (Four Semesters)

Abbreviation used:

AC	Audit course	LC	Lab Course	PA	Practical Assessment
PC	Professional Core	PR	Project/ Practical/ Internship	L	Lecture
PE	Professional Elective	SE	Seminar/ Expert Lecture/ Etc.	T	Tutorial
OE	Open Elective	IA*	Internal Assessment	P	Practical
MC	Mandatory/ Common Course	EA	End-Semester Assessment		
*Internal Assessment Mark (30 marks) consists of (i) Mid Semester (20 marks), (ii) Quiz/ Assignment (10 marks)					

Subject Code Format:

A1	A2	B3	C4	C5	C6
School/ Dept. (Offering)		**Level**	**0:** AC	**Serial Number (01 to 99)**	
BH: Basic Sciences and Humanities		**1:** UG/ Int. Msc. (1st Year)	**1:** PC	01/ 03/…/ 19: Odd Sem. (GTE)	
CS: Computer Sciences		**2:** UG/ Int. Msc. (2nd Year)	**2:** PE	21/ 23/…/ 39: Odd Sem. (STE)	
EE: Electrical Sciences		**3:** UG/ Int. Msc. (3rd Year)	**3:** OE	41/ 43/…/ 59: Odd Sem. (WRE)	
EI: Electronic Sciences		**4:** UG/ Int. Msc. (4th Year)	**4:** MC	61/ 63/…/ 79: Odd Sem. (URP)	
IP: Infrastructure and Planning		**5:** UG/ Int. Msc. (5th Year)	**5:** LC	81/ 83/…/ 99: Odd Sem. (Prog-5)	
MS: Mechanical Sciences		**6:** PG (1st Year)	**6:** PR		
BT: Biotechnology		**7:** PG (2nd Year)	**7:** SE	02/ 04/…/ 20: Even Sem. (GTE)	
TE: Textile Engineering		**8:** Ph.D.	**8:**	22/ 24/…/ 40: Even Sem. (STE)	
			9:	42/ 44/…/ 60: Even Sem. (WRE)	
				62/ 64/…/ 80: Even Sem. (URP)	
				82/ 84/…/ 98: Even Sem. (Prog-5)	

1st Semester

Sl. No.	Subject Type	Subject Code	Subject Name	Teaching Hours			Credit	Maximum Marks			
				L	T	P		IA	EA	PA	Total
1	PC 1	IP6161	Evolution of Urban and Regional Planning	3	0	0	3	30	70	-	100
2	PC 2	IP6163	Planning Theory and Techniques	3	0	0	3	30	70	-	100
3	PC 3	IP6165	Infrastructure Planning	3	0	0	3	30	70	-	100
4	PC 4	IP6167	Socio Economic Basis for planning	3	0	0	3	30	70	-	100
5	MC 1	IP6461	Research Methodology and Technical Report Writing	3	0	0	3	30	70	-	100
6	LC 1	IP6561	Planning Studio-I (Area Appreciation and Neighbourhood Planning)	0	0	8	4	-	-	100	100
			Total	**15**	**0**	**8**	**19**	**150**	**350**	**100**	**600**

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2nd Semester

Sl. No.	Subject Type	Subject Code	Subject Name	Teaching Hours			Credit	Maximum Marks			
				L	T	P		IA	EA	PA	Total
1	PC 5	IP6162	Regional Planning and Development	3	0	0	3	30	70	-	100
2	PC 6	IP6164	Land Economics and Real Estate Planning	3	0	0	3	30	70	-	100
3	PC 7	IP6166	Environmental Planning & Management	3	0	0	3	30	70	-	100
4	PC 8	IP6168	Inclusive Urban Planning	3	0	0	3	30	70	-	100
5	OE 1	Any One from the List of *OE 1 (Appendix-I)		3	0	0	3	30	70	-	100
6	LC 2	IP6562	Urban Information System	0	0	4	2	-	-	100	100
7	LC 3	IP6564	Planning Studio–II (Development Plan)	0	0	8	4	-	-	100	100
			Total	**15**	**0**	**12**	**21**	**150**	**350**	**200**	**700**

3rd Semester

Sl. No.	Subject Type	Subject Code	Subject Name	Teaching Hours			Credit	Maximum Marks			
				L	T	P		IA	EA	PA	Total
1	PC 9	IP7161	Planning Legislation	3	0	0	3	30	70	-	100
2	PC 10	IP7163	Development Management and Finance	3	0	0	3	30	70	-	100
3	PC 11	IP7165	Project Planning and Appraisal	3	0	0	3	30	70	-	100
4	PC 12	IP7167	Transportation Planning	3	0	0	3	30	70	-	100
5	PE 1	IP7261	Public Private Partnership in Development	3	0	0	3	30	70	-	100
		IP7263	Urban Heritage and Conservation								
		IP7265	Planning For Leisure and Tourism								
		IP7267	Public Policy and Politics								
6	LC 4	IP7561	Planning Studio-III (Regional Plan)	0	0	8	4	-	-	100	100
7	PR 1	IP7661	Professional Training (Summer)	0	0	4	2	-	-	100	100
			Total	**15**	**0**	**12**	**21**	**150**	**350**	**200**	**700**

4th Semester

Sl. No.	Subject Type	Subject Code	Subject Name	Teaching Hours			Credit	Maximum Marks			
				L	T	P		IA	EA	PA	Total
1	PC 13	IP7162	Professional Practice	3	0	0	3	30	70	-	100
2	PE 2	IP7262	Energy, Climate Change and Urban Development	3	0	0	3	30	70	-	100
		IP7264	City and Metropolitan Planning								
		IP7266	Disaster Risk Mitigation and Management								
3	PR 2	IP7662	Seminar Presentation	0	0	4	2	-	-	100	100
4	PR 3	IP7664	Thesis	0	0	12	6	-	-	100	100
			Total	**6**	**0**	**16**	**14**	**60**	**140**	**200**	**400**

Credits and Maximum Marks

Sl. No.	Semester	Credits	Maximum Marks
1	1st	19	600
2	2nd	21	700
3	3rd	21	700
4	4th	14	400
	Total	**75**	**2400**

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(APPENDIX-I)

LIST OF (MC/ *OE/ AC) SUBJECTS OFFERED BY SCHOOLS/ DEPARTMENTS

School/ Department (Offering)	Subject Type	Subject Code	Subject Name
Basic Science and Humanities	MC 1	BS6401	Mathematical Methods in Engineering
	*OE 1	BH6302	Spectroscopic Techniques for Organic Compounds
		BH6304	Chemical Biology
		BH6306	Nanoscience and Technology
		BH6308	Statistical Methods
		BH6310	Operations Research
		BH6312	Advanced Numerical Methods
	AC 1	BH6001	English for Research Paper Writing
		BH6003	Sanskrit for Technical Knowledge
		BH6005	Value Education
		BH6007	Constitution of India
	AC 2	BH6002	Pedagogy Studies
		BH6004	Stress Management by Yoga
		BH6006	Personality Development through Life Enlightenment Skills
Computer Sciences	*OE 1	CS6302	Pattern Recognition
		CS6304	Distributed Systems
		CS6306	Microfluidic Biochip
		CS6308	Programming in C
		CS6310	Data Structure
		CS6312	Computer Vision
Electrical Sciences	*OE 1	EE6302	Quantitative Methods for Energy Management and Planning
		EE6304	Soft Computing application to Engineering
		EE6306	Illumination Engineering
		EE6308	AI and ML for Biomedical Sciences
Electronic Sciences	*OE 1	EI6302	Machine Learning and Artificial Intelligence
		EI6304	IoT and its Applications
		EI6306	Parallel Processing
		EI6308	Signal Processing in Mechatronics Systems
		EI6310	Micro Electro Mechanical Systems
Infrastructure and Planning	*OE 1	IP6302	Universally Accessible Built Environments
		IP6304	Environment Impact Analysis
		IP6306	Geotechnics for Waste Materials
		IP6308	Project Planning and Management
	AC 2	IP6002	Disaster Management
Mechanical Sciences	MC 2	MS6403	Research Methodology and IPR
	*OE 1	MS6302	Production Planning and Control
		MS6304	Design of Experiment
		MS6306	Total Quality Management and Six Sigma
		MS6308	Financial Institutions, Instruments and Markets
		MS6310	Renewable Energy Systems
		MS6312	Design of Thermal Systems
		MS6314	Sensors and Actuators in Industry
		MS6316	Robot Mechanics and Control
Biotechnology	*OE 1	BT6302	Nanobiotechnology
Textile Engineering	*OE 1	TE6302	Polymer Composite

***N.B.:**

The Open Elective Subjects (*OE 1) are specifically open for all programs of Schools/ Departments, other than the School/ Department offering the same subject.