EVALUATION SCHEME

OF

B. TECH

OF

I YEAR
(As per NEP-2020)

DEPARTMENT OF CIVIL ENGINEERING

INTEGRAL UNIVERSITY
LUCKNOW

SYLLABUS AND EVALUATION SCHEME

Branch: B. Tech Civil Engineering Program

(w.e.f. 2025-26)

Year – I, Semester – I

S. No.	Course Category	Code No	Name of Subject	Periods				Evaluation Scheme						Subject Total	Attributes							United Nations Sustainable Development Goals (SDGs)
				L	T	P	C	Continuous Assessment (CA)			ESE				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
								CT	TA	Total	TE	PE	Total									
1	BSC	CH101	Chemistry	3	-	2	4	65	35	100	75	25	100	200	✓	✓	✓		✓			
2	BSC	MT101	Mathematics I	3	1	-	4	50	25	75	75	-	75	150								
3	ESC	EE103	Basic Electrical Engineering	3	-	2	4	65	35	100	75	25	100	200	✓							SDG4,7,8,9,11
4	ESC	EC101	Basic Electronics	3	-	-	3	50	25	75	75	-	75	150	✓		✓					SDG4,9
5	HSSM	ES102	Concept of Environmental Studies	3	-	-	3	50	25	75	75	-	75	150			✓		✓			SDG6,13,14,15
6	ESC	CE102	Civil Engineering Drawing	-	-	4	2	15	10	25	-	25	25	50								
7	MC	HM101	Rastra Gaurav	2	-	-	0	-	-	-	100	-	100	100								
				17	**1**	**8**	**20**	**295**	**155**	**450**	**475**	**75**	**550**	**1000**								

L – Lecture; **T –** Tutorial; **P –** Practical; **C** – Credits; **CT** – Class Test; **TA** – Teacher's Assessment,

TE- Theory Exam, **PE**- Practical Exam

Continuous Assessment (CA) = Class Test + Teacher Assessment

End Semester Exam (ESE) = Theory Exam + Practical Exam

Course Total = CA + ESE

PCC- Professional Core Courses **MC-** Mandatory Course

HSSM- Humanities, Social Sciences & Management Courses

SYLLABUS AND EVALUATION SCHEME

Branch: B. Tech Civil Engineering Program

(w.e.f. 2025-26)

Year – I, Semester – II

S. No.	Course Category	Code No	Name of Subject	Periods				Evaluation Scheme						Subject Total	Attributes							United Nations Sustainable Development Goals (SDGs)
				L	T	P	C	Continuous Assessment (CA)			ESE				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
								CT	TA	Total	TE	PE	Total									
1	BSC	PY101	Physics	3	-	2	4	65	35	100	75	25	100	200	✓		✓					SDG4
2	BSC	MT112	Mathematics II	3	1	-	4	50	25	75	75	-	75	150	✓	✓	✓					SDG9
3	ESC	CS101	Computer Programming	3	-	2	4	65	35	100	75	25	100	200			✓					SDG4,9
4	ESC	ME101	Basic Mechanical Engineering and Workshop	3	-	2	4	65	35	100	75	25	100	200	✓		✓					SDG4,9
5	PEC	As per Annexure	Department Elective - I	3	-	-	3	50	25	75	75	-	75	150								
6	ESC	CE103	Building Information Modelling	-	-	4	2	15	10	25	-	25	25	50								
7	IPC	CE104	Internship/Mini Project/Training	-	-	2	1	-	-	50	-	-	-	50								
	Total			**18**	**1**	**10**	**24**			**625**			**525**	**1150**								

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Course Total = CA + ESE
PCC- Professional Core Courses **OEC-** Open Elective Courses **IPC-** Internship/Project Courses

<u>Departmental Elective – I</u>
CE106 Introduction to Civil Engineering Profession
CE161 Sustainable Design of Building
CE162 Construction Equipment and Techniques

INTEGRAL UNIVERSITY

DEPARTMENT OF CIVIL ENGINEERING

PROGRAMME: B.TECH CIVIL ENGINEERING

PROGRAM SPECIFIC OUTCOMES (PSO):

PSO-1: *Analyse, plan, design and manage using relevant standards and apply state-of-the-art tools and technologies to provide innovative sustainable solutions in Civil Engineering domain.*

PSO-2: *Excel in competitive professional environment and higher Studies utilizing professional skills and techniques.*

PROGRAM EDUCATIONAL OBJECTIVES (PEO):

PEO-1: *Graduates will excel as engineering professionals and leaders, solving complex technological challenges while upholding global standards.*

PEO-2: *Graduates will drive research, innovation, and entrepreneurship, advancing engineering systems and national development.*

PEO-3: *Graduates will address societal and environmental challenges through responsible and sustainable engineering practices.*

PEO-4: *Graduates will pursue continuous learning and professional development to contribute to knowledge and industry.*

PROGRAM OUTCOMES (PO):

PO-1: Engineering Knowledge: *Apply knowledge of mathematics, natural science, computing, engineering fundamentals and Civil Engineering respectively to develop to the solution of complex engineering problems.*

PO-2: Problem Analysis: *Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development.*

PO-3: Design/Development of Solutions: *Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required.*

PO-4: Conduct Investigations of Complex Problems: *Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions.*

PO-5: Engineering Tool Usage: *Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems.*

PO-6: The Engineer and The World: *Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment.*

PO-7: Ethics: *Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws.*

PO8: Individual and Collaborative Team work: *Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.*

PO-9: Communication: *Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences.*

PO-10: Project Management and Finance: *Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.*

PO-11: Life-Long Learning: *Recognize the need for and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change.*