

गुरु घासीदास विश्वविद्यालय
(केन्द्रीय विश्वविद्यालय अधिनियम 2009 क्र. 25 के अंतर्गत स्थापित केन्द्रीय विश्वविद्यालय)
कोनी, बिलासपुर - 495009 (छ.ग.)



Guru Ghasidas Vishwavidyalaya
(A Central University Established by the Central Universities Act 2009 No. 25 of 2009)
Koni, Bilaspur - 495009 (C.G.)

Department : *Civil Engineering*

Programme Name : *B.Tech.*

Academic Year : 2021-22

Courses which focuses on Professional Ethics, Gender, Human Values, Environment & Sustainability and other value framework:

Sr. No.	Course Code	Name of the Course
01.	CE203THS03	Professional Practice, Law & Ethics
02.	CE204TMC02	Management (Organizational Behaviour)



Scheme and Syllabus

SCHEME OF B.TECH. III SEMESTER CIVIL ENGINEERING (New CBCS)

W.E.F. 2021-22 (ODD SEMESTER)

S.No.	Course No.	Subject Theory	Periods			Evaluation Scheme			Credits
			L	T	P	IA*	ESE	Total	
1	CE 203TBS05	Engineering Mathematics-III	3	1	0	30	70	100	4
2	CE203TPC01	Strength of Materials	3	1	0	30	70	100	4
3	CE203TPC02	Fluid Mechanics-I	3	0	0	30	70	100	3
4	CE203TPC03	Building Materials & Construction	3	0	0	30	70	100	3
5	CE203TPC04	Surveying & Geomatics	3	0	0	30	70	100	3
6	CE203THS03	Professional Practice, Law & Ethics	2	0	0	30	70	100	2
Practicals									
1	CE203PPC01	Survey Lab	0	0	2	30	20	50	1
2	CE203PPC02	Fluid Mechanics Lab	0	0	2	30	20	50	1
TOTAL						Total Credits			21
L - Lecture Hours, T-Tutorial Hours, P - Practical Hours, CT - Class Test, ESE – End Semester Exam;									

SCHEME OF B.TECH. IV SEMESTER CIVIL ENGINEERING (New CBCS)

W.E.F. 2021-22 (EVEN SEMESTER)

S.No.	Course No.	Subject Theory	Periods			Evaluation Scheme			Credits
			L	T	P	IA*	ESE	Total	
1	CE204TPC05	Engineering Economics	3	1	0	30	70	100	3
2	CE204TPC06	Concrete Technology	3	1	0	30	70	100	3
3	CE204TPC07	Structural Analysis-I	3	0	0	30	70	100	4
4	CE204TPC08	Fluid Mechanics-II	3	0	0	30	70	100	3
5	CE 204THS02	Effective Technical Communication	3	0	0	30	70	100	3
6	CE204TMC02	Management (Organizational Behaviour)	2	0	0	-	-	-	0
Practicals									
1	CE204PES06	Computer Aided Civil Engg. Drawing	0	0	2	30	20	50	1
2	CE204PPC03	Material Testing Lab	0	0	2	30	20	50	1
3	CE204PHS01	Effective Technical communication lab	0	0	2	30	20	50	1
TOTAL						Total Credits			19
L - Lecture Hours, T-Tutorial Hours, P - Practical Hours, CT - Class Test, ESE – End Semester Exam;									



SYLLABUS	(SEMESTER-III)	Periods/Week			Internal Assessment (IA)			ESE	Grand Total	Credits
		L	T	P	CT-I	CT-II	TOTAL			
<i>Subject Code:</i>	CE203THS03							70	100	02
<i>Subject:</i>	Professional Practice, Law & Ethics	2	-	-	15	15	30			

Course Objectives:

- To know about roles of various stakeholders in formulating standards of practice and to learn about ethical values in professionalism.
- To study general principles of contracts management and practice involving tender proposal.
- To understand ADR mechanism like arbitration, conciliation, Lok Adalat in judicial system.
- To learn legal aspect of labour engagement and other construction related law in civil engineering.
- To understand law and policy related to Intellectual property, Copyright, Trademarks, Patents and Piracy

Course Content

UNIT 1: Professional Practice – Respective roles of various stakeholders: Government (constituting regulatory bodies and standardization organizations, prescribing norms to ensure safety of the citizens); Standardization Bodies (ex. BIS, IRC)(formulating standards of practice); professional bodies (ex. Institution of Engineers(India), Indian Roads Congress, IIA/ COA, ECI, Local Bodies/ Planning Authorities) (certifying professionals and offering platforms for interaction); Clients/ owners (role governed by contracts); Developers (role governed by regulations such as RERA); Consultants (role governed by bodies such as CEAI); Contractors (role governed by contracts and regulatory Acts and Standards); Manufacturers/ Vendors/ Service agencies (role governed by contracts and regulatory Acts and Standards). Professional Ethics – Definition of Ethics, Professional Ethics, Business Ethics, Corporate Ethics, Engineering Ethics, Personal Ethics; Code of Ethics as defined in the website of Institution of Engineers (India); Profession, Professionalism, Professional Responsibility, Professional Ethics; Conflict of Interest, Gift Vs Bribery, Environmental breaches, Negligence, Deficiencies in state-of-the-art; Vigil Mechanism, Whistleblowing, protected disclosures.

UNIT 2: General Principles of Contracts Management: Indian Contract Act, 1972 and amendments covering General principles of contracting; Contract Formation & Law; Privacy of contract; Various types of contract and their



features; Valid & Voidable Contracts; Prime and sub-contracts; Joint Ventures & Consortium; Complex contract terminology; Tenders, Request For Proposals, Bids & Proposals; Bid Evaluation; Contract Conditions & Specifications; Critical /“Red Flag” conditions; Contract award & Notice To Proceed; Variations & Changes in Contracts; Differing site conditions; Cost escalation; Delays, Suspensions & Terminations; Time extensions & Force Majeure; Delay Analysis; Liquidated damages & Penalties; Insurance & Taxation; Performance and Excusable Non-performance; Contract documentation; Contract Notices; Wrong practices in contracting (Bid shopping, Bid fixing, Cartels); Reverse auction; Case Studies; Build-Own-Operate & variations; Public- Private Partnerships; International Commercial Term.

UNIT 3: Arbitration, Conciliation and ADR (Alternative Dispute Resolution) system: Arbitration – meaning, scope and types – distinction between laws of 1940 and 1996; UNCITRAL model law – Arbitration and expert determination; Extent of judicial intervention; International commercial arbitration; Arbitration agreements – essential and kinds, validity, reference and interim measures by court; Arbitration tribunal – appointment, challenge, jurisdiction of arbitral tribunal, powers, grounds of challenge, procedure and court assistance; Award including Form and content, Grounds for setting aside an award, Enforcement, Appeal and Revision; Enforcement of foreign awards – New York and Geneva Convention Awards; Distinction between conciliation, negotiation, mediation and arbitration, confidentiality, resort to judicial proceedings, costs; Dispute Resolution Boards; Lok Adalats.

UNIT 4: Engagement of Labour and Labour & other construction-related Laws: Role of Labour in Civil Engineering; Methods of engaging labour- on rolls, labour sub-contract, piecerate work; Industrial Disputes Act, 1947; Collective bargaining; Industrial Employment (Standing Orders) Act, 1946; Workmen’s Compensation Act, 1923; Building & Other Construction Workers (regulation of employment and conditions of service) Act (1996) and Rules (1998); RERA Act 2017, NBC 2017

UNIT 5: Law relating to Intellectual property: Introduction – meaning of intellectual property, main forms of IP, Copyright, Trademarks, Patents and Designs, Secrets; Law relating to Copyright in India including Historical evolution of Copy Rights Act, 1957, Meaning of copyright – computer programs, Ownership of copyrights and assignment, Criteria of infringement, Piracy in Internet – Remedies and procedures in India; Law relating to Patents under Patents Act, 1970 including Concept and historical perspective of patents law in India, Patentable inventions with special reference to biotechnology products, Patent protection for computer programs, Process of obtaining patent – application, examination, opposition and sealing of patents, Patent cooperation



treaty and grounds for opposition, Rights and obligations of patentee, Duration of patents – law and policy considerations, Infringement and related remedies.

Text Book/ References:

1. B.S. Patil, Legal Aspects of Building and Engineering Contracts, 1974.
2. The National Building Code, BIS, 2017
3. RERA Act, 2017
4. Meena Rao (2006), Fundamental concepts in Law of Contract, 3rd Edn. Professional Offset
5. Neelima Chandiramani (2000), The Law of Contract: An Outline, 2nd Edn. Avinash Publications Mumbai
6. Avtarsingh (2002), Law of Contract, Eastern Book Co.
7. Dutt (1994), Indian Contract Act, Eastern Law House
8. Anson W.R. (1979), Law of Contract, Oxford University Press
9. Kwatra G.K. (2005), The Arbitration & Conciliation of Law in India with case law on UNCITRAL Model Law on Arbitration, Indian Council of Arbitration
10. Wadhera (2004), Intellectual Property Rights, Universal Law Publishing Co.
11. T. Ramappa (2010), Intellectual Property Rights Law in India, Asia Law House
12. Bare text (2005), Right to Information Act
13. O.P. Malhotra, Law of Industrial Disputes, N.M. Tripathi Publishers
14. K.M. Desai(1946), The Industrial Employment (Standing Orders) Act
15. Rustamji R.F., Introduction to the Law of Industrial Disputes, Asia Publishing House
16. Vee, Charles & Skitmore, Martin (2003) Professional Ethics in the Construction Industry, Engineering Construction and Architectural management, Vol.10, Iss2, pp 117-127, MCB UP Ltd
17. American Society of Civil Engineers (2011) ASCE Code of Ethics – Principles Study and Application
18. Ethics in Engineering- M.W.Martin&R.Schinzinger, McGraw-Hill
19. Engineering Ethics, National Institute for Engineering Ethics, USA
20. Engineering ethics: concepts and cases – C. E. Harris, M.S. Pritchard, M.J.Rabins
22. CONSTRUCTION CONTRACTS,
<http://www.jnormanstark.com/contract.htm>
23. Internet and Business Handbook, Chap 4, CONTRACTS LAW,
<http://www.laderapress.com/laderapress/contractslaw1.html>
24. Contract&Agreements
<http://www.tco.ac.ir/law/English/agreements/General/Contract%20Law/C.htm>
25. Contracts, <http://206.127.69.152/jgretch/crj/211/ch7.ppt>
26. Business & Personal Law. Chapter 7. “How Contracts Arise”,
<http://yucaipahigh.com/schristensen/lawweb/lawch7.ppt>



27. Types of Contracts,
<http://cmsu2.cmsu.edu/public/classes/rahm/meiners.con.ppt>
28. IV. TYPES OF CONTRACTS AND IMPORTANT PROVISIONS,
<http://www.worldbank.org/html/opr/consult/guidetxt/types.html>
29. Contract Types/Pricing Arrangements Guideline- 1.4.G (11/04/02),
<http://www.sandia.gov/policy/14g.pdf>

Course Outcomes:

At the end of the course student will be able to

- To describe respective roles of regulatory bodies and ethical practice to be followed by engineering professionals.
- To define principle of tender filing and contract management.
- To distinguish between ADR mechanism and formal judicial proceedings for dispute resolution.
- To explain role of labour and other construction-related laws in civil engineering.
- To identify law and policy related to Intellectual property, Copyright, Trademarks, Patents and Piracy.



SYLLABUS	(SEMESTER-IV)	Periods/ Week			Internal Assessment (IA)			ESE	Grand Total	Credits
		L	T	P	CT-I	CT-II	TOTAL			
<i>Subject Code:</i>	CE204TMC02							-	-	-
<i>Subject:</i>	Management (Organizational Behaviour)	3	-	-	-	-	-			

Course Learning Objectives:

The objective of this Course is

- To improve students understanding of human behavior in organization and the ability to lead people to achieve more effectively toward increased organizational performance.
- To understand individual behavior in organizations, including diversity, attitudes, job satisfaction, emotions, moods, personality, values, perception, decision making, and motivational theories.
- To understand group behavior in organizations, including communication, leadership, power and politics, conflict, and negotiations.
- To understand the organizational system, including organizational structures, culture, human resources, and change.

Course Content:

UNIT 1: FOCUS AND PURPOSE: Definition, need and importance of organizational behaviour – Nature and scope – Frame work – Organizational behaviour models.

UNIT 2: INDIVIDUAL BEHAVIOUR: Personality – types – Factors influencing personality – Theories – Learning – Types of learners – The learning process – Learning theories – Organizational behaviour modification. Misbehaviour – Types – Management Intervention. Emotions- Emotional Labour – Emotional Intelligence – Theories. Attitudes – Characteristics – Components – Formation – Measurement- Values. Perceptions – Importance – Factors influencing perception – Interpersonal perception- Impression Management. Motivation – importance – Types – Effects on work behavior.

UNIT 3: GROUP BEHAVIOUR: Organization structure – Formation – Groups in organizations – Influence – Group dynamics – Emergence of



informal leaders and working norms – Group decision making techniques Team building – Interpersonal relations – Communication – Control.

UNIT 4: LEADERSHIP AND POWER: Meaning – Importance – Leadership styles – Theories – Leaders Vs Managers – Sources of power – Power centers – Power and Politics.

UNIT 5: DYNAMICS OF ORGANIZATIONAL BEHAVIOUR: Organizational culture and climate – Factors affecting organizational climate – Importance. Job satisfaction – Determinants – Measurements – Influence on behavior. Organizational change – Importance – Stability Vs Change – Proactive Vs Reaction change – the change process – Resistance to change – Managing change. Stress – Work Stressors – Prevention and Management of stress – Balancing work and Life. Organizational development – Characteristics – objectives –. Organizational effectiveness

TEXT BOOKS

1. Stephen P. Robins, Organisational Behavior, PHI Learning / Pearson Education, 11th edition, 2008.
2. Fred Luthans, Organisational Behavior, McGraw Hill, 11th Edition, 2001.

Course Outcomes:

At the end of the course the students shall be able

- To Compare and contrast theories of organizational behavior.
- To analyze management issues as related to organizational behavior.
- To evaluate ethical issues as related to organizational behaviour
- To examine challenges of effective organizational communication
- To examine the differences and similarities between leadership, power, and management.
- To assess the impact of culture on organizational behavior