



GOVERNMENT COLLEGE OF ENGINEERING AURANGABAD

**(An Autonomous Institute of Govt. of Maharashtra)
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Humanities Social Science and Management Courses

**(UG Program)
(Effective from: A.Y. 2021-2022)**

ITHS0020 : Professional Ethics and Cyber Laws		
Teaching Scheme	Examination Scheme	
Lectures: 03 hrs/ week	ISE I	15 Marks
Tutorial: 0	ISE II	15 Marks
Credits:03	ISE III	10 Marks
	End Semester Examination	60 Marks

Course Description:

This course is aimed at to make students familiar with the fundamental concepts of computer ethics, ethical decision making, Cybercrimes and cyber laws. Also it covers fundamental; rights, Intellectual Property Issues in Cyber Space and international perspectives of cyber laws and jurisdiction.

Course Outcome: After completion of this course students will be able to:

- CO1** Define the fundamental concepts of computer ethics, ethical decision making, cyber crime and cyber law
- CO2** Illustrate computer ethics, ethical decision making, cyber crime and cyber law
- CO3** Identify and classify various cybercrimes with respect to organizational weaknesses.
- CO4** Apply Information to individual role and ethics responsibility towards society.
- CO5** Determine the legal bases for the right to privacy and freedom of expression in one's own nation and how those concepts vary from country to country.

Detailed Syllabus:

- Unit 1** An Overview of Ethics. Moral v/s Ethics, Why Computer Ethics, Philosophical Ethics: Distinguishing Descriptive and Normative Claims, Ethical Relativism, Utilitarianism, Deontological Theories, Rights, Virtue Ethics, Ethics for IT Professionals and IT Users – Various Scenarios. Foundations of Information Ethics. Ethical Issues Involving Computer Security: Hacking, Hacktivism, and Counter hacking
- Unit 2** Ethical Decision Making: Types of ethical choices, Making defensible decisions, Ethical dilemmas, law and ethics. Crime incident Handling Basics: Hacking, cyber activism, Tracking hackers, clues to cybercrime, privacy act, search warrants, common terms, organizational roles, procedure for responding to incidents, reporting procedures, legal considerations Information Technology Act 2000,IT. Scope, jurisdiction, offense and contraventions, powers of police, adjudication
- Unit 3** Introduction: Cybercrime and Information Security, Cybercriminals, Classifications of Cybercrimes Cyber offenses How Criminals Plan the Attacks, Social Engineering, Cyberstalking, Cyber cafe and Cybercrimes, Botnets: The Fuel for Cybercrime, Attack Vector, Digital Forgery, Cyber Stalking/Harassment, Cyber Pornography, Identity Theft &Fraud, Cyber terrorism.
- Unit 4** Fundamental rights and duties in Cyberspace, Right to Privacy, Right to Data Protection, Intellectual Property Issues in Cyber Space: Copyright Law, Patent Law, Trademarks & Domain Names Related issues, right and liabilities of the government and public servant, The judicature.

Unit 5 Introduction: Perspectives of Various Stakeholders and Challenges for International Law, Jurisdiction and Attribution of State Responsibility in Cyberspace, Regulation of Cyberspace and Human Rights, Cyber Terrorism, Future Prospects of Public International Law of Cyberspace

Text Books & Reference Books

1. Deborah G Johnson, *Computer Ethics*, Pearson Education Pub., ISBN : 81-7758-593-2
2. Nina Godbole, SunitBelapure, *Cyber Security*, Wiley India, New Delhi
3. Kriangsak Kittichaisaree, *Public International Law of Cyberspace*, 2017
4. Earnest A. Kallman, J.P Grillo, *Ethical Decision making and IT: An Introduction with Cases*, McGraw Hill Pub.
5. Basu, Durga Das, *Introduction to constitution of India*, 2021

Mapping of Course outcome with Program Outcomes and Program Specific Outcomes

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1						3	1		2		3	
CO2						3	1		2		3	
CO3				2		1	3					
CO4						3					2	
CO5						1			2			

3– High 2 – Medium 1 – Low

Assessment:

- ISE I** : It shall be based on one of the / or combination of few of: Class test, MCQs test, Surprise test, Mini project, Case studies etc. Maximum marks shall be 15
- ISE II** : It shall be based on class test of maximum 15 marks
- ISE III** : It shall be based on one of the / or combination of few of: Power point presentation, Question & answer / Numerical solution, Surprise test/classroom activity, Attendance,punctuality and sincerity throughout semester, assignments etc. Maximum marks shall be 10
- ESE** : It shall be based on written examination of maximum 60 marks

Assessment Pattern:

Assessment Pattern Level No.	Knowledge Level	ISE I	ISE II	ISE III	End Semester Examination
K1	Remember	07	08	00	20
K2	Understand	08	07	05	20
K3	Apply	00	00	05	20
K4	Analyze	00	00	00	00
K5	Evaluate	00	00	00	00
K6	Create	00	00	00	00
Total Marks 100		15	15	10	60

Assessment table:

Assessment Tool	K2	K2	K3
	CO1,CO2	CO3,CO4	CO5
ISE I (15 Marks)	07	08	00
ISE II(15 Marks)	08	07	00
ISE III (10 Marks)	00	05	05
ESE Assessment (60 Marks)	20	20	20
Total Marks 100			

Special Instructions if any: Nil

ITHS1030: Business Intelligence		
Teaching Scheme	Examination Scheme	
Lectures: 03 hrs/ week	ISE I	15 Marks
Tutorial: 0	ISE II	15 Marks
Credits:03	ISE III	10 Marks
	End Semester Examination	60 Marks

Course Description: To expose the students to the basics of business intelligence system with an understanding of modeling aspects behind Business Intelligence.

Course Outcome:

- CO1 Understand the need for business intelligence its applications
- CO2 Know the business intelligence life cycle and its techniques
- CO3 Explore different tools and techniques for analysis and decision making
- CO4 Discuss modeling and analysis of data

Detailed Syllabus:

- Unit 1 Business Intelligence:** Effective and timely decisions – Data, information and knowledge – Role of mathematical models – Business intelligence architectures: Cycle of a business intelligence analysis – Enabling factors in business intelligence projects – Development of a business intelligence system – Ethics and business intelligence.
- Unit 2 Decision Making, Systems, Modeling:** Introduction and Definitions, Models, Phases of the Decision-Making Process, Decision Making: The Intelligence Phase, Decision Making: The Design Phase, Decision Making: The Implementation Phase
- Unit 3 Decision Support System:** How Decisions Are Supported, Decision Support System Configurations, Decision Support System Characteristics and Capabilities, Decision Support System Classifications, Components of Decision Support Systems
- Unit 4 Modeling and Analysis:** Management Support Systems Modeling, Structure of Mathematical Models for Decision Support, Certainty, Uncertainty, and Risk Management Support Systems, Mathematical Programming Optimization, Spreadsheet Model, Linear Programming, Multiple Goals, Sensitivity Analysis, What-If Analysis, and Goal Seeking, Decision Analysis with Decision Tables and Decision Trees
- Unit 5 Business Intelligence Applications:** Digital Marketing models: Google analytics, Search Engine marketing, Email marketing, Social media marketing, Sales force management, Business case studies, Logistic and Production models – Supply chain optimization, Optimization models for logistics planning, Revenue management system, Business Case studies.

Text Books & Reference Books

1. Efraim Turban, Ramesh Sharda, DursunDelen, *Decision Support and Business Intelligence Systems*, 9th Edition, Pearson 2013.
2. Carlo Vercellis Politecnico di Milano, *Business Intelligence: Data Mining and Optimization for Decision Making*, A John Wiley and Sons, Ltd., Publication.
3. Ian Dodson, *The Art of Digital Marketing: The Definitive Guide to Creating Strategic, Targeted, and Measurable*, Wiley publications
4. Larissa T. Moss, S. Atre, "Business Intelligence Roadmap: The Complete Project Lifecycle of Decision Making", Addison Wesley, 2003.
5. Carlo Vercellis, *Business Intelligence: Data Mining and Optimization for Decision Making*, Wiley Publications, 2009.
6. David Loshin Morgan, Kaufman, *Business Intelligence: The Savvy Manager"s Guide*, Second, Edition, 2012.

Mapping of Course outcome with Program Outcomes and Program Specific Outcomes

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12
CO1						2	1	1			1	2
CO2		1				1					1	1
CO3						1	3	1	1	2		1
CO4										2		2
CO5						2	1	1			1	2

3– High 2 – Medium 1 – Low

Assessment:

- ISE I** : It shall be based on one of the / or combination of few of: Class test, MCQs test, Surprise test, Mini project, Case studies etc. Maximum marks shall be 15
- ISE II** : It shall be based on class test of maximum 15 marks
- ISE III** : It shall be based on one of the / or combination of few of: Power point presentation, Question & answer / Numerical solution, Surprise test/classroom activity, Attendance,punctuality and sincerity throughout semester, assignments etc. Maximum marks shall be 10
- ESE** : It shall be based on written examination of maximum 60 marks

Assessment Pattern:

Assessment Pattern Level No.	Knowledge Level	ISE I	ISE II	ISE III	End Semester Examination
K1	Remember	00	00	00	00
K2	Understand	05	02	00	15
K3	Apply	05	05	03	25
K4	Analyze	05	05	05	20
K5	Evaluate	00	03	02	00
K6	Create	00	00	00	00
Total Marks 100		15	15	10	60

Assessment table:

Assessment Tool	K2	K2	K3	K4
	C01	C02	C03	C04
ISE I (15 Marks)	05	05	05	00
ISE II(15 Marks)	05	05	05	00
ISE III (10 Marks)	00	00	05	05
ESE Assessment (60 Marks)	10	20	20	10
Total Marks 100	20	30	35	15

Special Instructions if any: Nil