Curriculum relevance: Course contents with cross cutting issues (UG) 2018-19 to 2023-24
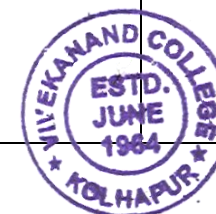
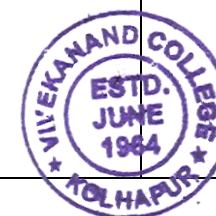| Sr. No.	Course Code	Course / SECs Titles	Year of Introduction	Professional Ethics	Gender	Human Values	Environment and Sustainability	Sustainable Development goals	NEP-2020
1.	DSC-1006A	Problem Solving using Computers & Database Management System	2018-19	Plagiarism, respecting intellectual property rights and responsible use of data and technology.	Encouraging gender diversity in computer science	Incorporating human values like honesty, integrity, and empathy into the curriculum, and fostering ethical decision-making and responsible use of technology.		Aligning the curriculum with the Sustainable Development Goals, such as addressing poverty, ensuring quality education, and promoting good health, by leveraging computer science and databases.	
2.	DSC-1006B	Problem Solving using Computers & Database Management System	2018-19	Plagiarism, respecting intellectual property rights and responsible use of data and technology.	Encouraging gender diversity in computer science	Incorporating human values like honesty, integrity, and empathy into the curriculum, and fostering ethical decision-making and responsible use of technology.	Teaching the environmental impact of technology, including energy consumption and electronic waste, and exploring ways to develop eco-friendly computing solutions.		Following to the guidelines and reforms proposed in the National Education Policy-2020 to provide a holistic and multidisciplinary education, including issues like integrating technology into education and promoting research and innovation.

3.	**DSC-1006C**	Operating System and Object-Oriented Programming	**2019-20**	Inculcating a strong sense of ethics in students regarding the development and use of computer systems, including issues such as privacy, security, and responsible software development.	addressing issues related to gender bias and discrimination in the field, and promoting equal opportunities for all.	Integrating human values such as teamwork, empathy, and social responsibility into the curriculum to produce well-rounded computer science professionals who can work effectively in diverse environments.		Following the guidelines and reforms proposed in the National Education Policy-2020 to provide a multidisciplinary and holistic education that encourages creativity, innovation and a broader understanding of technology's role in society.
4.	**SEC-1006A**	Introduction to HTML and CSS	**2019-20**		Encouraging gender diversity in HTML and CSS			
5.	**DSC-1006D**	Operating System and Data Structures	**2019-20**	Teaching and reinforcing the importance of ethical behavior when working with data structures, including issues related to data privacy, security, and responsible data management.		Integrating human values such as integrity, empathy, and social responsibility into the curriculum to develop ethically responsible data management and decision-making skills.	Incorporating discussions about the environmental impact of technology, including energy consumption, e-waste, and sustainable practices in software development and hardware design.	Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in the field of data structures.
6.	**SEC-1006B**	Introduction to JavaScript	**2019-20**		Encouraging gender diversity in JavaScript			

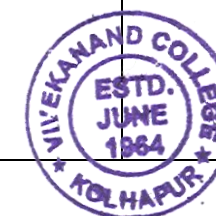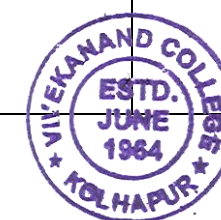|								
7.	**DSC-1006E1**	**Section-I** Computer Network **Section-II** Software Engineering	**2020-21**	Emphasizing the ethical use of computer networks, including issues related to privacy, security, and responsible data transmission and reception		Integrating human values such as trustworthiness, reliability, and social responsibility into the curriculum to develop ethical behavior and responsible networking practices.	Discussing the environmental impact of networking technologies, including energy consumption, carbon footprint, and sustainable practices in network design and management.		Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in the field of Computer Network and Software Engineering.
8.	**DSC-1006E2**	**Section-I** Internet Technologies-I **Section-II** Introduction to Java	**2020-21**	Ethical considerations in Internet Technologies, including issues related to cybersecurity, privacy, and responsible data handling in web applications.	Encouraging gender diversity in internet technologies	Integrating human values such as accessibility, inclusivity, and user-centric design into the curriculum to ensure that internet technologies are developed	The environmental impact of internet technologies, including energy consumption of data centers	Exploring how Internet Technologies-I can contribute to goals such as quality education, reduced inequalities, and responsible consumption and production.	Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in the field of Internet Technologies and Java.
9.	**SEC-1006C**	PHP Programming	**2020-21**		Encouraging gender diversity in PHP Programming				
10.	**DSC-1006F1**	**Section-I** Advanced Computer Network **Section-II** Object Oriented Software Engineering	**2020-21**	Ethical considerations in advanced computer networking management practices.	Encouraging gender diversity in advanced computer networking	Integrating human values such as accessibility, reliability, and user-centric design into the curriculum to ensure that advanced computer networks			Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in the field of Advanced Computer Network and Object Oriented Software Engineering.

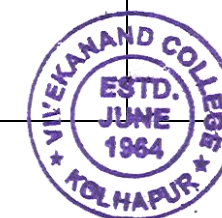|								
11.	DSC-1006F2	**Section-I** Internet Technologies-II **Section-II** Data Science using Python	2020-21	Ethical considerations in data science using Python and Flask		Fairness into the curriculum to ensure that data science projects are approached with consideration for the well-being and values of individuals and society.		Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in the field of Internet Technologies and Data Science.
12.	SEC-1006D	Advanced PHP Programming	2020-21		Encouraging gender diversity in Advanced PHP Programming			
13.	DSC-1006A	Problem Solving using Computers & Database Management System	2021-22	Plagiarism, respecting intellectual property rights and responsible use of data and technology.	Encouraging gender diversity in computer science	Incorporating human values like honesty, integrity, and empathy into the curriculum, and fostering ethical decision-making and responsible use of technology.		Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in Problem Solving using Computers & Database Management System
14.	DSC-1006B	Problem Solving using Computers & Database Management System	2021-22	Plagiarism, respecting intellectual property rights and responsible use of data and technology.	Encouraging gender diversity in computer science	Incorporating human values like honesty, integrity, and empathy into the curriculum, and fostering ethical decision-making and responsible use of technology.		Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in Problem Solving using Computers & Database Management System

15.	**DSC-1006C**	Operating System and Object-Oriented Programming	**2022-23**	Inculcating a strong sense of ethics in students regarding the development and use of computer systems, including issues such as privacy, security, and responsible software development.	addressing issues related to gender bias and discrimination in the field, and promoting equal opportunities for all.	Integrating human values such as teamwork, empathy, and social responsibility into the curriculum to produce well-rounded computer science professionals who can work effectively in diverse environments.		Following the guidelines and reforms proposed in the National Education Policy-2020 to provide a multidisciplinary and holistic education that encourages creativity, innovation and a broader understanding of technology's role in society.
16.	**SEC-1006A**	Introduction to HTML and CSS	**2022-23**		Encouraging gender diversity in HTML and CSS			
17.	**DSC-1006D**	Operating System and Data Structures	**2022-23**	Teaching and reinforcing the importance of ethical behavior when working with data structures, including issues related to data privacy, security, and responsible data management.		Integrating human values such as integrity, empathy, and social responsibility into the curriculum to develop ethically responsible data management and decision-making skills.	Incorporating discussions about the environmental impact of technology, including energy consumption, e-waste, and sustainable practices in software development and hardware design.	Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in the field of data structures.
18.	**SEC-1006B**	Introduction to JavaScript	**2022-23**		Encouraging gender diversity in JavaScript			

No.	Code	Course	Year	Professional Ethics	Gender	Human Values	Environment	SDG	NEP
19.	DSC-1006E1	Computer Network	2023-24	Emphasizing the importance of professional ethics in computer networking, including issues related to cybersecurity, data privacy, and responsible network management practices.			The environmental impact of computer networks, including considerations for energy-efficient network infrastructure and promoting sustainable networking practices.		Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in the field of Computer Network.
20.	DSC-1006E2	Software Engineering	2023-24	Emphasizing the importance of professional ethics in software engineering	Promoting gender diversity in software Development and Design		The environmental impact of software engineering practices, including considerations for sustainable coding practices, energy-efficient algorithms, and eco-friendly software development.	Explore how software development can contribute to goals such as good health, quality education, and reduced inequalities through the creation of impactful software solutions.	Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in the field of Software Engineering.
21.	DSC-1006E3	Internet Technologies-I	2023-24	Ethical considerations in data science using Python and Flask		Fairness into the curriculum to ensure that data science projects are approached with consideration for the well-being and values of individuals and society.			Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in the field of Web Development using Flask.

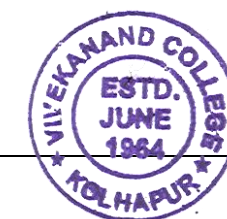|								
22.	**DSC-1006E4**	Introduction to Java	**2023-24**	Emphasizing the importance of professional ethics in Java	Fostering gender-inclusive learning	Integrating human values in coding JAVA			Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in the field of Java Programming
23.	**SEC-1006C**	PHP Programming	**2023-24**			Integrating human values in coding PHP			Implementing NEP will provide a multidisciplinary and holistic education for PHP web development
24.	**DSC-1006F1**	Advanced Computer Network	**2023-24**	Emphasizing the importance of professional ethics in Advanced Computer Network	Promoting gender diversity in Advanced Computer Network				Implementing NEP will provide a multidisciplinary and holistic education for Advanced Computer Network
25.	**DSC-1006F2**	Object Oriented Software Engineering	**2023-24**	Emphasizing the importance of professional ethics in Object Oriented software engineering	Promoting gender diversity in software Development and Design		The environmental impact of Object-Oriented software engineering practices	Explore how software development can contribute to goals such as good health, quality education, and reduced inequalities through the creation of impactful software solutions.	Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in the field of Object-Oriented Software Engineering.
26.	**DSC-1006F3**	Internet Technologies-II	**2023-24**	Ethical considerations in data science using Python and Flask		Fairness into the curriculum to ensure that data science projects are approached with			Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and

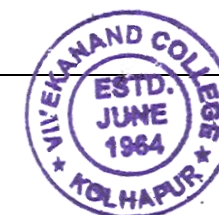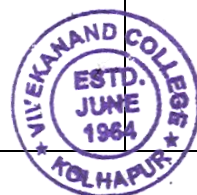| No.	Code	Course Name	Year	Col5	Col6	Col7	Col8	Col9	Col10
						consideration for the well-being and values of individuals and society.			innovation in the field of Web Development using Flask.
27.	DSC-1006F4	Data Science using Python	2023-24	Ethical considerations in data science practices using Python, including responsible data handling, privacy considerations, and ethical decision-making in data analysis.	Fostering an inclusive learning environment for all students pursuing a career in data science using Python.	Integrating human values into the curriculum to ensure that data science projects are approached with consideration for the well-being and values of individuals and society.	Responsible use of computing resources in Python-based data analysis.		Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in the field of Data Science.
28.	SEC-1006D	Advanced PHP Programming	2023-24			Integrating human values in coding PHP Programming			
29.	DSC03CSC11	Problem Solving using Computers-I	2023-24	Plagiarism, respecting intellectual property rights and responsible use of data and technology.	Encouraging gender diversity in Problem Solving Skills	Incorporating human values into the curriculum, and fostering ethical decision-making and responsible use of technology.	Teaching the environmental impact of technology, including energy consumption and electronic waste (e-waste)		Implementing NEP will provide a multidisciplinary and holistic education that fosters critical thinking and innovation in Problem Solving using Computers
30.	DSC03CSC12	Introduction to DBMS-I	2023-24	Ethical considerations in database management, including issues related to data privacy, security, and responsible data handling practices	Promoting gender diversity in the field of database management	The curriculum ensure that database systems are developed with consideration for the well-being and needs of diverse users.		To explore how effective database systems can contribute to goals such as quality education, reduced inequalities, and responsible	Promoting creativity, critical thinking and innovation in the context of database management Systems in NEP-2020.

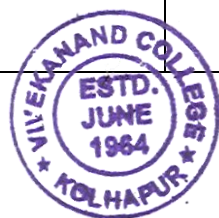| #	Course Code	Course Name	Year						
								consumption and production.	
31.	MIN03CSC11	Problem Solving using Computers-I	2023-24	Plagiarism, respecting intellectual property rights and responsible use of data and technology.	Encouraging gender diversity in Problem Solving Skills	Incorporating human values into the curriculum, and fostering ethical decision-making and responsible use of technology.	Teaching the environmental impact of technology, including energy consumption and electronic waste (e-waste)		Implementing multidisciplinary and holistic education that fosters critical thinking and innovation in Problem Solving using Computers in NEP-2020
32.	MIN03CSC12	Introduction to DBMS-I	2023-24	Ethical considerations in database management, including issues related to data privacy, security, and responsible data handling practices	Promoting gender diversity in the field of database management	The curriculum ensure that database systems are developed with consideration for the well-being and needs of diverse users.		To explore how effective database systems can contribute to goals such as quality education, reduced inequalities, and responsible consumption and production.	Promoting creativity, critical thinking and innovation in the context of database management Systems in NEP-2020.
33.	OEC03CSC11	Fundamentals of Computer-I	2023-24	Highlighting the importance of professional ethics in Basics of computer science	Promoting gender diversity in the field of computer science	Integrating human values into the curriculum to ensure that fundamental computer concepts are approached with consideration for the well-being and needs of diverse users.	Discussing the environmental impact of computing practices, including considerations for energy-efficient hardware, responsible e-waste disposal, and promoting sustainable computing solutions.	Explore how computing can contribute to goals such as quality education, reduced inequalities, and sustainable cities and communities.	Promoting creativity, critical thinking and innovation in the context of Fundamentals of Computers in NEP-2020.

34.	OEC03CSC12	Introduction to Web-I	2023-24	Ethical considerations in web development, including issues related to user privacy, security, and responsible use of web technologies.	Promoting gender diversity in the field of web development	Integrating human values into the curriculum to ensure that web applications are developed with consideration for the well-being and needs of diverse users.	Impact of web technologies, including considerations for energy-efficient server configurations, responsible data storage practices, and promoting sustainable web development.	Explore how web technologies can contribute to goals such as quality education, reduced inequalities, and sustainable cities and communities.	Promoting creativity, critical thinking and innovation in the context of NEP-2020.
35.	IKS03GEC11	Indian Knowledge System	2023-24	Highlighting ethical considerations in the study and application of Indian Knowledge System, including issues related to cultural sensitivity, respect for diverse perspectives, and responsible use of traditional knowledge.	Promoting gender inclusivity in the exploration of Indian Knowledge System	Integrating human values such as cultural diversity, inclusivity, and respect into the curriculum to ensure that the study of Indian Knowledge System is approached with consideration for the well-being and cultural values of individuals and communities.	Incorporating the environmental and sustainable practices embedded in traditional Indian knowledge into the curriculum, emphasizing the importance of ecological balance and sustainable living practices.	To explore how traditional knowledge can contribute to goals such as good health, quality education, and sustainable communities.	Following to the principles and reforms outlined in the National Education Policy-2020, which emphasize a holistic and multidisciplinary education approach. This includes fostering an appreciation for the rich cultural heritage and knowledge systems of India through the study of IKS.
36.	DSC03CSC21	Problem Solving using Computers-II	2023-24	Plagiarism, respecting intellectual property rights and responsible use of data and technology.	Encouraging gender diversity in Problem Solving Skills	Incorporating human values into the curriculum, and fostering ethical decision-making and responsible use of technology.	Teaching the environmental impact of technology, including energy consumption and electronic waste (e-waste)		Implementing multidisciplinary and holistic education that fosters critical thinking and innovation in Problem Solving using Computers in NEP-2020

No.	Course Code	Course Name	Year						
37.	DSC03CSC22	Introduction to DBMS-II	2023-24	Ethical considerations in database management, including issues related to data privacy, security, and responsible data handling practices	Promoting gender diversity in the field of database management	The curriculum ensure that database systems are developed with consideration for the well-being and needs of diverse users.		To explore how effective database systems can contribute to goals such as quality education, reduced inequalities, and responsible consumption and production.	Promoting creativity, critical thinking and innovation in the context of database management Systems in NEP-2020.
38.	MIN03CSC21	Problem Solving using Computers-II	2023-24	Plagiarism, respecting intellectual property rights and responsible use of data and technology.	Encouraging gender diversity in Problem Solving Skills	Incorporating human values into the curriculum, and fostering ethical decision-making and responsible use of technology.	Teaching the environmental impact of technology, including energy consumption and electronic waste (e-waste)		Implementing multidisciplinary and holistic education that fosters critical thinking and innovation in Problem Solving using Computers in NEP-2020
39.	MIN03CSC22	Introduction to DBMS-II	2023-24	Ethical considerations in database management, including issues related to data privacy, security, and responsible data handling practices	Promoting gender diversity in the field of database management	The curriculum ensure that database systems are developed with consideration for the well-being and needs of diverse users.		To explore how effective database systems can contribute to goals such as quality education, reduced inequalities, and responsible consumption and production.	Promoting creativity, critical thinking and innovation in the context of database management Systems in NEP-2020.
40.	OEL03CSC21	Fundamentals of Computer-II	2023-24	Highlighting the importance of professional ethics in Basics of computer science	Promoting gender diversity in the field of computer science	Integrating human values into the curriculum to ensure that fundamental computer concepts are approached with consideration for	The environmental impact of computing practices, including considerations for energy-efficient hardware, responsible e-waste disposal, and	Explore how computing can contribute to goals such as quality education, reduced inequalities, and sustainable cities and communities.	Promoting creativity, critical thinking and innovation in the context of Fundamentals of Computers in NEP-2020.

					the well-being and needs of diverse users.	promoting sustainable computing solutions.		
41.	OEL03CSC22	Introduction to Web-II	2023-24	Ethical considerations in web development, including issues related to user privacy, security, and responsible use of web technologies.	Promoting gender diversity in the field of web development	Integrating human values into the curriculum to ensure that web applications are developed with consideration for the well-being and needs of diverse users.	Impact of web technologies, including considerations for energy-efficient server configurations, responsible data storage practices, and promoting sustainable web development.	Explore how web technologies can contribute to goals such as quality education, reduced inequalities, and sustainable cities and communities.	Promoting creativity, critical thinking and innovation in the context of NEP-2020.
42.	VSC03CSC21	HTML and CSS	2023-24	Highlighting ethical considerations in web development using HTML and CSS, including issues related to user privacy, accessibility, and responsible use of web technologies.	Promoting gender diversity in the field of web development, addressing gender biases, and fostering an inclusive learning environment for all students pursuing HTML and CSS skills.	Integrating human values such as accessibility, usability, and user-centric design into the curriculum to ensure that web applications developed using HTML and CSS are aligned with the well-being and needs of diverse users.	The environmental impact of web technologies, including considerations for energy-efficient design, sustainable hosting practices, and promoting eco-friendly web development using HTML and CSS.	To explore how web technologies can contribute to goals such as quality education, reduced inequalities, and sustainable cities and communities.	Promoting creativity, critical thinking and innovation in the context of NEP-2020.

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