

**Rajeev Gandhi Govt. Post Graduate College, Ambikapur, Chhattisgarh**

**Department of Computer Application**

**Institution integrates cross cutting issues relevant to Gender, Human Values, Professional Ethics, Environment and Sustainability**

**List of courses that have relevance to Gender, Human Values, Professional Ethics, Environment and Sustainability**

Name of the Course	Course Code	Subject	Relevant Issues				Description
			Gender	Environment & Sustainability	Human Values	Professional Ethics	
BCA I SEM	DSCBCA101	Computer Fundamental				✓	Computer fundamentals refers to the basics of using digital devices such as computers, smart phones and tablets. "Computer" used to only refer to the basics of using a computer and associated devices; however, it has since expanded to include most frequently-used digital devices.
	DSCBCA102	Discrete Maths		✓	✓	✓	Boolean algebra has been used to come up with all analysis of flight accidents. The logical tools make it possible to determine the causes of failures i.e human factors, environmental factors, and equipment failures.
	DSCBCA103	PC SOFTWARE PACKAGE				✓	It is a group of computer programs that can be licensed, downloaded or subscribed to as a bundle of related products. The products in the package may include executable programs, program documentation and, in some cases, example files that show how the various components work.
	DSCBCA201	C LANGUAGE				✓	Original software code is written to maintain sustainability In the code

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BCA II SEM	DSCBCA202	OPERATING SYSTEM		✓		✓	Operating Systems are designed and controlled using languages considering social and environmental concern.
	DSCBCA203	CONCEPT OF SOFTWARE				✓	Software comprises the entire set of programs, procedures, and routines associated with the operation of a computer system. The term was coined to differentiate these instructions from hardware—i.e., the physical components of a computer system.
BCA III SEM	DSCBCA301	DIGITAL ELECTRONICS		✓	✓	✓	Environment friendly digital projects are built thereby learning human values of helping and teamwork. The project schedule helps them to learn timely submission, originality and creativity in their work.
	DSCBCA302	COMPUTER NETWORKS		✓		✓	Environment friendly networks help to build latest communication technologies for the betterment of the society.
	DSCBCA303	DATA STRUCTURE				✓	Organization of data in computer memory is learnt using concepts like Stacks, Queues, Tree and Graphs.
	DSCBCA304	E COMMERCE				✓	Cyber security and prevention of cyber crimes is discussed. Ethical issues pertaining to E-Business is included in the curriculum
	DSCBCA401	OBJECT ORIENTED PROGRAMMING USING C++				✓	C++ is an object-oriented programming language which gives a clear structure to programs and allows code to be reused, lowering development costs. C++ is portable and can be used to develop applications that can be adapted to multiple platforms.

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BCA IV SEM	DSCBCA402	COMPUTER GRAPHICS AND MULTIMEDIA			✓	✓	This technology is nowadays largely adopted by most computer based applications to bridge the gap between a human user & the computer. By this , multiple media are implemented and used in computer based application to enhance their understanding ability before a common man.
	DSCBCA403	COMPUTER ORGANISATION AND ARCHITECTURE				✓	Computer Organization and Architecture is the study of internal working, structuring, and implementation of a computer system. Architecture in the computer system, same as anywhere else, refers to the externally visual attributes of the system.
	DSCBCA404	MOBILE COMPUTING				✓	Mobile computing is the technology that allows users to connect and transmit data, audio/voice, and video from one device to another without being tethered to a stationary area with cabling and wires. Devices supporting mobile computing include smartphones, tablets, laptops, and wearable devices, such as smartwatches.
	DSCBCA405	CLOUD COMPUTING				✓	Environmental friendly cloud servers help to digitize the organ isation data.
	DSCBCA406	INTERNET OF THINGS		✓	✓	✓	The Internet of Things (IoT) can help reduce humanity's impact on tile environment. IoT can help organizations be more sustainable by assisting in the management of resources, the reduction of energy expenditures, the streamlining of data collection on various patterns

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BCA V SEM	DSCBCA501	DATABASE DESIGN AND RDBMS				✓	The Course focusses on issues pertaining to protection of database and privacy of the users.
	DSCBCA502	SOFTWARE ENGINEERING				✓	Software engineering principles and practices are non perishable and are always reused and available in the Industry. Software engineers practice an ethical approach to their profession by maintaining high standards and a programmer centric approach
	DSCBCA503	ARTIFICIAL INTELLIGENCE			✓	✓	Machine intelligence helps human to solve complex computational needs.
	DSCBCA504	PROGRAMMING IN JAVA				✓	Students develop real-time projects using Ajax and HTTP Server which helps them to write reusable code.
	DSCBCA505	NUMERICAL ANALYSIS				✓	area of mathematics and computer science that creates, analyzes, and implements algorithms for obtaining numerical solutions to problems involving continuous variables. Such problems arise throughout the natural sciences, social sciences, engineering, medicine, and business.
	DSCBCA406	PROGRAMMING IN VISUAL BASIC				✓	VB is a GUI-based development tool that offers a faster RAD than most other programming languages. VB also features syntax that is more straightforward than other languages, a visual environment that is easy to understand and high database connectivity.

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BCA VI SEM	DSCBCA601	.NET TECHNOLOGY				✓	Web Technology has sustainability as websites and applications developed using this technology will last long even 10-20 years after the creation.
	DSCBCA602	DATA MINING AND WAREHOUSING				✓	Adoption of Good safety standards to collect data and maintaining the confidentiality.
	DSCBCA603	NETWORK SECURITY				✓	Network security is a broad term that covers a multitude of technologies, devices and processes. In its simplest term, it is a set of rules and configurations designed to protect the integrity, confidentiality and accessibility of computer networks and data using both software and hardware technologies.
	DSCBCA604	PYTHON PROGRAMMING				✓	Python is used in Data science to solve business problems. These include detecting fraud, optimizing transportation routes, and forecasting demand. However, a growing number of organizations and individuals are demanding more. Data and data science should be applied to solve the existential problems we are facing.
	DSCBCA605	THEORY OF COMPUTATION				✓	The theory of computation is the branch that deals with what problems can be solved on a model of computation, using an algorithm, how efficiently they can be solved

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	DSCBCA606	MACHINE LEARNING				✓	It is a process in which computing systems learn from data and use algorithms to execute tasks without being explicitly programmed.