

**Swarnnim Startup & Innovation University**  
**Swarnnim School of Computing & IT**  
**BSC-IT Honours**  
**Cross-Cutting Issues**

SEMESTER-I					
Sr. No.	Course Name	Human Values	Professional Ethics	Gender Sensitization	Environment Sustainability
1	Fundamentals of Computers	-	-	Operating System: ,Computer Fundamentals, Information Concepts & Processing System, Computer Network and Communication, Internet and its Applications:	-
2	PROGRAMMING IN C	-	-	Introduction, Control flow, pointers and other data, "ACM Transactions on Programming Languages and Systems"	-
3	Web Development Using HTML, CSS & XML	-	World Wide Web, Client, Side Scripting Languages	Browsers: Internet Explorer, Mozilla Firefox, Introduction to HTML, Khan Academy (www.khanacademy.org)	-
	Mathematical Foundation	-	Relations	Set theory, Properties of set operations (Commutative, Associative, Distributive, De-Morgan's laws). Relations and Functions, Differentiation	Equivalence relation, Limit, Differentiation: • Limit



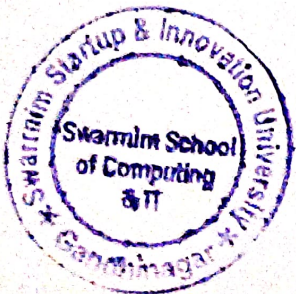
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5	Communication Skills	-	Essential Skills For Success SWOT Analysis	Fundamentals Of Communication, Self Presentation, Types of Ethics	The Art of Attitude, Concept Of Happiness & Appreciation. Professional Interaction
6	Foundation of Entrepreneu rship	-	Cognitive foundations of entrepreneurship	Introduction to Entrepreneurship:	Characteristics or traits of successful entrepreneurs and myths related to entrepreneurship:
7	Indian Science and Technology	-	India's Contribution to the World	Fundamentals: An overview of Indian contributions to technology, Technological Innovations, Water Management & Transportation: Harappan and Traditional Water Management System of Gujarat,	Mathematics & Astronomy; Ecology and Environment
<b>SEMESTER-II</b>					
1	Data Structures using C	-	-	Continuous Implementation (Stack), Recursion, Sorting & Searching,	-



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2	Database Management System	-	-	File Organization Relational Data Model:	-
3	Mobile Application	-	-	• Introduction to Mobile App Development Programming for Mobile Apps	-
4	Foundation in Statistical Methods	-	-	Classification of data, Measures of dispersion, Meaning of Correlation, types of correlation,	-
5	Logical & Critical Thinking	-	Blood Relations	Simplification and Approximation	Crypt arithmetic
6	Identifying Entrepreneurial Opportunities	-	Characteristics of brilliant business ideas Introduction:	Business Idea Creation & IPR, Business Model:	Opportunities: Their nature, discovery, and Creation
7	Environmental Studies	-	Human Population and Environment: Population Growth, World and Indian scenario, Population and Environmental Degradation, Malthusian theory,	Environmental pollutions:	Introduction to Environment and Environmental Studies, Natural Resources, Ecology and Ecosystems



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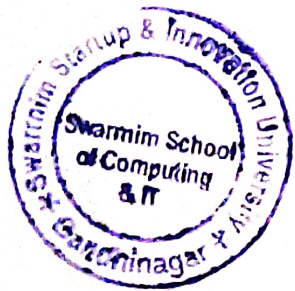
**Swarnnim Startup & Innovation University**  
**Swarnnim School of Computing & IT**  
**BCA Honours**  
**Cross-Cutting Issues**

SEMESTER-I					
Sr. No.	Course Name	Human Values	Professional Ethics	Gender Sensitization	Environment Sustainability
1	Fundamentals of Computers	-	-	Computer Fundamentals, Programming Languages, Information Concepts & Processing System, Elements of a Computer Processing System, Application Software, Computer Network and Communication, Computer Science Review	-
2	PROGRAMMING IN C	-	-	Introduction, Input-Output Functions, Software: Practice and Experience, Embedded Systems Design	-
3	Web Development Using HTML, CSS & XML	-	Computer Hope (www.computerhope.com)	World Wide Web, Web page, Home page, Web site, Static, Dynamic and Active web page, Overview of Protocols, Simple Mail Transfer Protocol, Gopher, Telnet, Emails, TFTP, Hyper Text Transfer Protocol, Client server computing concepts. Web Client and Web Server Web Browser, Studytonight (www.studytonight.com) • Computer Science Unplugged (csunplugged.org),	Browsers: Internet Explorer, Mozilla Firefox, Khan Academy (www.khanacademy.org)



				HowStuffWorks (www.howstuffworks.com)	
4	Mathematical Foundation	-	-	Set theory, Relations and Functions: Matrices and Determinants; Limit, Differentiation:	-

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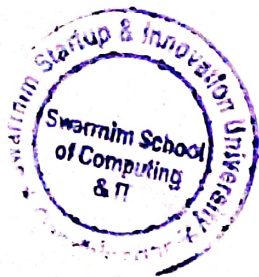


5	Communication Skills	-	Fundamentals Of Communication, The Art of Attitude Concept Of Happiness & Appreciation Professional Interaction	People Skills , Essential Skills For Success, First Impressions , Self Presentation Trainer will talk about how students can present themselves to others in various settings. Selfpresentation plays a crucial role in creating initial impressions. A positive and confident selfpresentation can set the tone for successful interactions and relationships., Professional Ethics, Polite Protocol Trainer will explain the importance of greeting etiquettes and talk about formal greetings and informal greetings., Types of Ethics	SWOT Analysis, A'S Of Dressing
6	Foundation of Entrepreneu rship	-	-	Introduction to Entrepreneurship, Cognitive foundations of entrepreneurship	Characteristics or traits of successful entrepreneurs and myths related to entrepreneurship:



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7	Indian Science and Technology	-	Bhaskaracarya, Ecology and Environment:	Fundamentals: An overview of Indian contributions to technology, Technological Innovations,	Metallurgy, Textile Chemistry and Technology, Water Management & Transport and Traditional Water Management in Gujarat, Historical Sites- Sringeri, Indian Water Management Systems, Ghats, Cave- Kanheri, etc., Contributions in Water Management, Modes and Reforms, Grand Trunk Road (Dakshinapath), Development of Techniques, Boat & Ship Building
SEMESTER-II					
1	Data Structures using C	-	-	Continuous Implementation (Stack), Recursion, Trees, Sorting	-



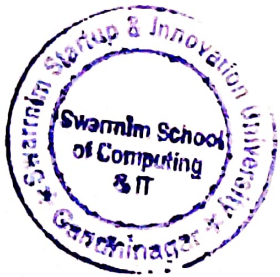
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2	Object Oriented Concepts using C++	-	-	Introduction- Introducing Object , Inheritance and Polymorphism, Generic function-	-
3	Core Java	-	-	Java Programming, classes	-
4	Foundation in Statistical Methods	-	-	Classification of data, Measures of Central Tendency: Computation of Arithmetic mean, median and mode for ungrouped data and grouped data., Measures of dispersion: Computation of Range, Quartile deviation, mean deviation and Standard deviation Concept of Skewness, Karl Pearson's, (Numerical Applications Only)	-
5	Logical & Critical Thinking	-	Simplification and Approximation, Blood Relations, Number System	Crypt arithmetic, Analogy & Odd one out	Direction & Distance
6	Identifying Entrepreneurial Opportunities	-	-	Opportunities: Their nature, discovery, and Creation:	Business Idea Creation & IPR
7	Environmental Studies	-	Human Population and Environment: Population	Definition and Components of Environment, Relationship	Introduction to Environment and Environmental Studies,



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			Growth, World and Indian scenario, Population and Environmental Degradation, Malthusian theory, Optimum theory,	between the different components of Environment, Man and Environment relationship, Impact of technology on Environment, Environmental	Natural Resources: , Ecology and Ecosystems: Environmental pollutions:
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