

St. Xavier's College (Autonomous), Ahmedabad

Syllabus of Semester – IV of the following departments under Faculty of Computer Science based on Undergraduate Curriculum Framework to be implemented from the Academic Year 2026-27.

DEPARTMENT OF COMPUTER SCIENCE

BCA(Hons.) Category-V

Skill Enhancement Course : Human Computer Interaction

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credit Distribution of The Course			Eligibility Criteria	Pre-requisite(s) of the Course (if any)
	Lecture	Tutorial	Practical / Practice		
Human Computer Interaction BCASE441C (SWAYAM COURSE)	2	0	0		Nil

Course Objective:

As a part of the curriculum, students are required to complete one SWAYAM course prescribed by the department/college during the semester. The course is delivered through the Government of India's SWAYAM platform and aims to enhance students' knowledge beyond the regular curriculum.

Students are expected to complete the course independently while adhering to all deadlines announced by the SWAYAM platform and the college.

Course Outcome

After successful completion of the course, students will be able to:

- Enhance domain knowledge through online learning.
- Develop self-learning and time management skills.
- Complete online assignments within deadlines.
- Understand concepts from experts across India.
- Earn credits as per university regulations (where applicable).

Step 1 – Course Announcement

- Department will announce the approved SWAYAM course(s).
- Students must follow the instructions shared by the course coordinator.

Step 2 – Registration

Students shall

- Register on the SWAYAM Portal.
- Use a valid Email ID.
- Use their own mobile number.
- Keep login credentials safe.
- Register within the deadline.

Step 3 – Enrollment Verification

Students must submit

- Screenshot of successful registration.
- Enrollment confirmation.
- Course details.

Failure to submit proof may result in non-consideration of enrollment.

Step 4 – Learning Phase

Students should

- Watch all video lectures.
- Read study material.
- Make personal notes.
- Complete every week's learning activities.

Step 5 – Assignment Submission

Students must

- Submit all assignments before deadlines.
- Ensure submissions are original.
- Avoid plagiarism.
- Check marks after submission.

Late submissions will not be entertained unless permitted by the SWAYAM platform.

Step 6 – Internal Monitoring

The department may ask students to submit

- Assignment marks
- Progress reports
- Completion percentage
- Screenshots of dashboard
- Attendance in review meetings

Students must cooperate with the coordinator.

Step 7 – Final Examination

If the course requires a proctored examination,

Students shall

- Register separately for the examination (if required).
- Pay examination fees (if applicable).
- Carry valid ID proof.
- Follow examination guidelines.

Step 8 – Result Submission

After completion, students must submit

- Final Grade Card
- Certificate (if issued)
- Result Screenshot
- Any additional documents requested by the department

5. Student Responsibilities

Every student is expected to

- Complete the entire course independently.
- Follow all SWAYAM deadlines.
- Check announcements regularly.
- Maintain discipline during review sessions.
- Submit all required proofs on time.
- Preserve login credentials.
- Inform the coordinator immediately if any technical issue occurs.
- Maintain academic honesty.

6. Attendance Policy

Students are expected to

- Regularly watch lectures.
- Complete learning activities.
- Attend review meetings conducted by the department.

Non-participation may affect internal evaluation wherever applicable.

7. Academic Integrity

Students shall not

- Copy assignments.
- Share answers.
- Submit another student's work.
- Use unfair means during assessments.

Any malpractice may lead to disciplinary action according to college rules.

- SelectedItems (only for CheckBoxList)
- Event
 - OnSelectedIndexChanged
- **Web Controls for Creating Lists**
- ListBox , DropDownList
- o Setting Properties
 - DataSource
 - DataTextField
 - DataValueField
 - AutoPostBack
 - Rows
 - SelectionMode(Only for ListBox)
 - Event
 - OnSelectedIndexChanged

o **Rich Controls**

• **Calendar**

- o Setting Properties
 - CellPadding
 - CellSpacing
 - DayHeaderStyle
 - DayNameFormat
 - DayStyle
 - FirstDayOfWeek
 - NextMonthText
 - NextPrevFormat
 - NextPrevStyle
 - OtherMonthDayStyle
 - PrevMonthText
 - PrevMonthText
 - SelectedDate
 - SelectedDates
 - SelectedDayStyle
 - SelectionMode
 - SelectMonthText
 - SelectorStyle
 - SelectWeelText
 - ShowDayHeader
 - ShowGridLine
 - ShowNextPrevMonth
 - ShowTitle
 - TitleFormat
 - TitleStyle
 - TodayDayStyle
 - TodayDate
 - VisibleDate
 - WeekendDayStyle
 - Events
 - DayRender
 - SelectionChanged
 - VisibleMonthChanged

• **AdRotator**

- o Setting Properties

- AdvertisementFile
- OnAdCreated
- KeywordFilter
- Target
- **File Upload**
- o **Other Controls**
- **Hyperlink**
- o Setting Properties
 - NavigateUrl
 - Text
 - ImageUrl
 - Target
- **Image**
- o Setting Properties
 - ImageUrl
 - AlternateText
 - ImageAlign
- **Image Map**
- o Setting Properties
 - HotSpotMode
 - HotSpots
 - ImageUrl
 - AlternateText
- **ASP.NET Page Directives**
 - @Page
 - @Control
 - @Import
 - @Register
 - @Assembly
 - @OutputCache

Validation Controls ASP.NET Objects and Data Collection Class

Validation Controls

- Following properties should be considered in each Validator control of ASP.NET
 - Properties
 - ControlToValidate
 - Display
 - Enabled
 - ErrorMessage
 - ForeColor
 - IsValid

• Required FieldValidator Control

• CompareValidator Control

Setting Properties

- ControlToCompare
- OperatorType
- ValueToCompare

RangeValidator Control

Setting Properties

- MaximumValue

- MinimumValue

RegularExpressionValidator control

o Setting Properties

ValidationExpression

Introduction to Custom Validator control

o Setting Properties

- ClientValidationFunction
- OnServerValidate

Data List Controls

Repeater Control and DataList Control

- Template
- AlternatingItemTemplate
- FooterTemplate
- HeaderTemplate
- ItemTemplate
- SeparatorTemplate

Introduction of GridView Or DataGrid Control

(Simple Demo of view records using above control)

Introduction of FormView and Detail View Controls

(Simple Demo of edit, delete and insert records using above control)

Authoring a User Control

- Login Control
- LoginView Control
- LoginStatus Control
- LoginName Control
- PasswordRecovery Control

ASP.NET Intrinsic Objects

- The HttpRequest Object
- The HttpResponse Object
- The HttpApplicationState Object
- The HttpSessionState Object

I/O and ADO.NET

Handling File I/O

- Reading Text Files
- Writing Text Files Binary Files I/O
- Performing File Operations
- File Information

IV

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ADO.NET

ADO.NET Programming Objects and Architecture

Displaying Database Data

Working with The Data Set and Data Table Objects

Text Book:

ASP.NET and VB.NET Web

Programming Publisher: Pearson

By Matt J. Crouch

Chapter – 1 (1.1, 1.2, 1.3, 1.4, 1.5)

Chapter - 3 (3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.8, 3.9, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18, 3.19, 3.23.1, 3.23.2, 3.24.4, 3.24.5)

Chapter – 4 (4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7)

Chapter – 7 (7.1, 7.2, 7.3, 7.4, 7.6)

Reference Books:

ASP.NET Developer's Guide Publisher: McGraw Hill
By Gerg Buczek

Note:

- (1) These topics can be covered using any version of .NET framework and Visual Studio. Therefore, there will be NO restriction in using the version available with the institute.**
- (2) VB.NET programming language should be used with ASP.NET**
- (3) Database should be any version of Ms Access or SQL Express Edition**