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| **Course Code:**  CSE4012 | **Course Title: UI/UX User Experience Design** | **TPC** | | **3** | **2** | **4** |
| **Version No.** | **1.0** | | | | | |
| **Course Pre-requisites/ Co-requisites** | **SE, (Web-Technologies/MAD),HCI.** | | | | | |
| **Anti-requisites (if any).** | **None** | | | | | |
| **Objectives:** | 1. To Introduce students to the process involved in planning and executing the design of visual communications. 2. To foster the ability to create and develop visual form in response to design problems. 3. To foster the development of technologically literate visual communicators who understand the use of traditional tools and new technology in support of their professional and academic career. 4. To promote the development of information literacy. 5. To develop the ability to demonstrate a measurable degree of competence in the use of computer and the major software packages utilized in print and web design. 6. To prepare students with the ability to use reasoning and analysis to research, analyze and evaluate visual communications according to the needs of its audience. | | | | | |
| **Expected Outcome:** | On completion of the course, students will have the ability to   1. Apply basic understanding of HTML and CSS code in the creation of various web pages and sites. All projects. 2. Demonstrate intermediate understanding of pixel-based imaging and resolution in the production of mockups and web images. All projects. 3. Apply understanding of digital imaging for web in the successful integration of images into web design. All projects. 4. Demonstrate basic understanding of UI (User Interface), UX (User Experience), Navigation and Interactivity in the design of user-friendly menus and navigation systems. All projects. | | | | | |
| **Module No. 1** | **INTRODUCTION TO UI** | | **7 Hours** | | | |
| [UI Design and Why it Matters](https://www.coursera.org/lecture/ui-design/introductory-panel-ui-design-and-why-it-matters-TNDYv)- UI Design Process-Psychology and Human Factors for User Interface Design- Mobile UI- Responsive websites | | | | | | |
| **Module No. 2** | **HUMAN COMPUTER INTERACTION** | | **8 Hours** | | | |
| Obstacles –Usability –Human Characteristics In Design– Human Interaction Speed –Business Functions –Requirement Analysis – Direct –Indirect Methods – Basic Business Functions – Design Standards – System Timings –Human Consideration In Screen Design – Structures Of Menus – Functions Of Menus–Contents Of Menu– Formatting – Phrasing The Menu – Selecting Menu Choice–Navigating Menus– Graphical Menus. | | | | | | |
| **Module No. 3** | **Techniques for designing interactive systems** | | 7 Hours | | | |
| Understanding requirements -Participative design -Interviews -Questionnaires -Probes -Card sorting techniques -Working with groups- Onsite working | | | | | | |
| **Module No. 4** | **Experience Design** | | 8 Hours | | | |
| Understanding Browsers and viewports -Engagement - Designing for pleasure -Aesthetics -Service design | | | | | | |
| **Module No. 5** | **Agents and Avatars** | | **7 Hours** | | | |
| Agents -Adaptive systems - An architecture for agents -Applications of agent-based interaction - Avatars and conversational agents | | | | | | |
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| **Module No. 6** | **Mobile Application UI and Wearable devices** | | **8 Hours** | | | |
| Layouts & Drawing Resources, Activities and Activity lifecycle, First sample Application, Understanding User Interface in mobile, Fundamental of mobile UI design, | | | | | | |
| **Text Books**  Harlow, England, “Designing Interactive Systems: A Comprehensive Guide to HCI, UX and Interaction Design**”**3rd ed. Addison Wesley, 2013  Layouts, | | | | | | |
| **References**   1. Wilbent. O. Galitz ,“The Essential Guide To User Interface Design”, John Wiley& Sons, 2001. | | | | | | |
| **Mode of Evaluation** | Continuous Assessment Test-1 20%  Continuous Assessment Test-2 20%  Final Assessment Test-3 20%  Practical Assessment (Mini Project) 40% | | | | | |
| **Recommended by the Board of Studies on** | 06.07.2018 | | | | | |
| **Date of Approval by the Academic Council** | 2nd Academic Council 21.07.2018 | | | | | |