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| **Course Title** | **Applications of Information & Communication Technologies** | | |
| **Course Code** | **GE-160** | | |
| **Credit Hours** | 3 (2,1) | | |
| **Category** | General Education | | |
| **Prerequisite** | None | | |
| **Co-Requisite** | None | | |
| **Follow Up** | None | | |
| **Course Introduction** | This course is designed to provide students with an exploration of the practical applications of Information and Communication Technologies (ICT) and software tools in various domains. Students will gain hands-on experience with a range of software applications, learning how to leverage ICT to solve daily life problems, enhance productivity and innovate in different fields. Through individual and interactive exercises and discussions, students will develop proficiency in utilizing software for communication, creativity, and more. | | |
| **Course Learning Outcomes (CLOs)** | At the end of the course, the students will be able to: | **BT** | **PLO** |
| | CLO1: Explain the fundamental concepts, components, and scope of ICT. | C2 (Explain) | 1,2 |
| | CLO2: Identify uses of various ICT platforms and tools for different purposes. | C4 (Identify) | 1,2,3 |
| | CLO3: Apply ICT platform and tools for different purposes to address basic needs in different domains of daily, academic, and professional life. | C3 (Apply) | 3,4,5 |
| | CLO4: Understand the ethical and legal considerations in use of ICT platforms and tools. | C2 (Understand) | 1,2,3 |
| **Syllabus** | **Introduction to ICT** Components of ICT (basics of hardware, software, ICT platforms, networks, local and cloud data storage, etc.), Scope of ICT (use of ICT in education, business, governance, healthcare, digital media and entertainment, etc.), Emerging technologies and future trends.<br>**Basic ICT Productivity Tools:** Effective use of popular search engines to explore WWW, Formal communication tools and etiquettes (Gamail, Microsoft Outlook, etc.) Microsoft Office Suites (Word, Excel, PowerPoint), Google Workspace (Google Docs, Sheets, Slides), Google Drive, Dropbox (cloud storage and file sharing), Google Drive (Cloud storage with Google Docs integration) and Microsoft OneDrive (Cloud storage with Microsoft integration), Evernote (Note-taking and organization applications) and OneNote (Microsoft's digital notebook for capturing and organizing ideas), Video conferencing (Google Meet, Microsoft Teams, Zoom, etc.), social media applications (LinkedIn, Facebook, Instagram, etc.)<br>**ICT in Education:** Working with learning management systems (Moodle, Canvas, Google Classrooms, etc.), Sources of online education courses (Coursera, edX, Udemy, Khan Academy, etc.), Interactive multimedia and virtual classrooms<br>**ICT in Health and Well-being:** Health and fitness tracking devices and applications (Google Fit, Samsung Health, Apple Health, Xiaomi Mi Band, Runkeeper, etc.), Telemedicine and online health consultations (OLADOC, Sehat Kahani, Mahram, etc.)<br>**ICT in Personal Finance and Shopping:** Online banking and financial management tools (JazzCash, Easypaisa, Zong PayMax, 1Link and MNET, Keenu Wallet, etc.), E- | | |

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| | commerce platforms. **Digital Citizenship and Online Etiquette:** Intellectual property and copyright issues, Ensuring<br>originality in content creation by avoiding plagiarism and unauthorized use of information |
| | sources, Content accuracy and integrity (ensuring that the content share through ICT platforms is free from misinformation, fake news, and manipulation). |
| **Practical Requirements** | 1. Guided tutorials and exercises to ensure that students are proficient in commonly used software applications such as word processing software (e.g., Microsoft Word), presentation software, (e.g., Microsoft PowerPoint), spreadsheet software (e.g., Microsoft Excel) among such other tools. Students may be assigned practical tasks that require them to create documents, presentations, and spreadsheets etc.<br>2. Assigning of tasks that involve creating, managing, and organizing files and folders on both local and cloud storage systems. Students will practice file naming conventions, creating directories, and using cloud storage solutions (e.g., Google Drive, OneDrive).<br>3. The use of online learning management systems (LMS) where students can access course materials, submit assignments, participate in discussion forums, and take quizzes or tests. This will provide students with the practical experience with online platforms commonly used in education and the workplace. |
| **Suggested Instructional/ Reading Material** | 1. "Discovering Computers" by Vermaat, Shaffer, and Freund.<br>2. Deborah Morley and Charles S. Parker, Understanding Computers: Today and Tomorrow, 16th edition, Cengage Learning, 2016, ISBN-13: 978-1337251853<br>3. "Computing Essentials" by Morley and Parker.<br>4. "GO! With Microsoft Office" Series by Gaskin, Vargas, and McLellan.<br>5. "Exploring Microsoft Office" Series by Grauer and Poatsy.<br>6. "Technology in Action" by Evans, Martin and Poatsy.<br>7. Livesley, Robert Kenneth. An introduction to automatic digital computers. Cambridge University Press, 2017.<br>8. Joan Lambert, Curtis Frye, Microsoft Office 2019 Step by Step, First Edition. ISBN: 978-1-50-930597-1. |