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|  |  | Ahsanullah University of Science and TechnologyBangladesh |

# COURSE OUTLINE

**1. Title**: **Software Development-III247, PEO, to be announced, 12**

**2. Code**: **CSE 2200**

**3. Credit hours**: **0.75**

**4. Level**: **Level 2, Term 2**

**5. Faculty**: **Engineering**

**6. Department**: **Computer Science and Engineering (CSE)**

**7. Programme**: **Bachelor of Science in Computer Science and Engineering (B.Sc. in CSE)**

**8. Synopsis from the Approved Curriculum**:

**Students will work in groups or individually to produce software based on current trends and developments in the sector.**

**9. Type of course (core/elective)**: **Core**

**10. Prerequisite(s) (if any)**: **NIL**

**11. Name of the instructor(s) with contact details and office hours**:

**Md. Aminur Rahman**

**Room: 7A01/D**

**Phone: Extension 504**

**E-mail: aminur.cse@aust.edu, aminur.aust27@outlook.com**

**Office hours: MON 01:50 PM – 03:30 PM; TUE 10:30 AM – 12:10 PM;**

**WED 10:30 AM – 12:10 PM;**

**Md. Mafizur Rahman**

**Room: N/A**

**Phone: 01612 102703**

**E-mail: shadiq.aust@gmail.com**

**Office hours: THU 08:00 AM – 10:30 AM**

**Md. Siam Ansary**

**Room: N/A**

**Phone: 01628 898686**

**E-mail: siamansary.cse@gmail.com**

**Office hours: MON 03:30 PM – 06:00 PM**

**12. Semester Offered**: **Spring, 2019-2020**

**13. Mapping of Course Outcomes with Bloom’s Taxonomy and Programme Outcomes**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl. No. | COs | POs | Bloom’s Taxonomy | | |
| C | A | P |
| **1** | 1. **Execute well known fundamental concepts of android application** | **1** |  |  | **2** |
| **2** | 1. **Perform latest industry techniques to design and develop android based application** | **3** |  |  | **3** |
| **3** | 1. **Adapt modern tools and techniques to modernize the application** | **5** |  |  | **4** |
| **4** | 1. **Execute notions that can bring positive influence on society** | **6** |  |  | **2** |

**14. Percentages of Assessment Methods**

|  |  |
| --- | --- |
| Method | Percentage |
| **Class Performance** | **20** |
| **Quizzes & Online/Offline/Assignment** | **30** |
| **Project** | **50** |

**15. Week wise distribution of contents and assessment methods**

|  |  |  |
| --- | --- | --- |
| Week | Topics | Assessment Method(s) |
| 1 | **Introduction to Android Programming and Android Studio Environment; Demonstration of Applications such as Uber, Pathao, etc that have made social impacts.** |  |
| 2 | **Applying layout designs and widgets in Android Programming;**  **Project Selection.** |  |
|
| 3 | **Introduction to Activity Code and Activity Life Cycle.**  **Project Development Initialization.** | **Offline/Online** |
| 4 | **Applying Splash Screen Activity and Activity Intent to Project.** | **Project Evaluation 1**  **Mid Term Quiz** |
|
| 5 | **Introduction to Android Database.** | **Project Evaluation 2** |
| 6 | **Review on all previously taught Android concepts.** | **Project Evaluation 3**  **Lab Final Quiz** |
| 7 | **Final Project Demonstration and Submission** | **Final Project Evaluation** |

**16.** **References**

16.1. Required (if any)

1. ***Android Programming for Beginners (1st Ed)*Authored by: John Horton**
2. ***Hello Android: Introducing Google’s Mobile Development Platform (1st Ed)*Authored by: Ed Burnette**
3. ***Head First Android Development: A Brain-Friendly Guide (1st Ed)*Authored by: Sawn Griffiths**

16.2. Recommended (if any)

1. [**https://developer.android.com/index.html**](https://developer.android.com/index.html)
2. [**https://developer.android.com/guide/index.html**](https://developer.android.com/guide/index.html)
3. **https://www.tutorialspoint.com/android/index.html**
4. [**https://developers.google.com/training/android/**](https://developers.google.com/training/android/)
5. **Google Classroom (class code: bcky9oq)**

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| **Prepared by:**  Signature:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Name: **Md. Aminur Rahman**  Department: **CSE**  Date: | **Checked by:**  Signature:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Name: **Dr. Mohammad Shafiul Alam**  **OBE Program Coordinator, CSE**  Date: | **Approved by:**  Signature:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Name: **Professor Dr. Kazi A Kalpoma**  HOD, **CSE**  Date: |

1. **Annex-1: PEO of CSE**
2. **Professionalism**
3. Graduates will demonstrate sound professionalism in computer science and engineering or related fields.
4. **PEO2 – Continuous Personal Development**
5. Graduates will engage in life-long learning in multi-disciplinary fields for industrial and academic careers.
6. **PEO3 – Sustainable Development**
7. Graduates will promote sustainable development at local and international levels.

# Annex-2: Mapping of PEO-PO

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1. PEO1 | 1. PEO2 | 1. PEO3 |
| 1. PO1 - Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems. | 1. **√** |  |  |
| 1. PO2 - Problem analysis: Identify, formulate, research and analyze complex engineering problems and reach substantiated conclusions using the principles of mathematics, the natural sciences and the engineering sciences. | 1. **√** |  |  |
| 1. PO3 - Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety as well as cultural, societal and environmental concerns. | 1. **√** |  |  |
| 1. PO4 – Investigation: Conduct investigations of complex problems, considering design of experiments, analysis and interpretation of data and synthesis of information to provide valid conclusions. | 1. **√** |  |  |
| 1. PO5 - Modern tool usage: Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations. | 1. **√** |  |  |
| 1. PO6 - The engineer and society: Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice. | 1. **√** |  | 1. **√** |
| 1. PO7 - Environment and sustainability: Understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of, and need for sustainable development. | 1. **√** |  | 1. **√** |
| 1. PO8 – Ethics: Apply ethical principles and commit to professional ethics, responsibilities and the norms of engineering practice. | 1. **√** |  |  |
| 1. PO9 - Individual work and teamwork: Function effectively as an individual and as a member or leader of diverse teams as well as in multidisciplinary settings. | 1. **√** | 1. **√** |  |
| 1. PO10 – Communication: Communicate effectively about complex engineering activities with the engineering community and with society at large. Be able to comprehend and write effective reports, design documentation, make effective presentations and give and receive clear instructions. | 1. **√** |  |  |
| 1. PO11 - Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one’s own work as a member or a leader of a team to manage projects in multidisciplinary environments. | 1. **√** |  |  |
| 1. PO12 - Life-long learning: Recognize the need for and have the preparation and ability to engage in independent, life-long learning in the broadest context of technological change. |  | 1. **√** |  |

# Annex-3: Blooms Taxonomy – Revised Version\*

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| --- | --- | --- | --- |
| 1. Level | 1. Cognitive Domain 2. (C) | 1. Affective Domain 2. (A) | 1. Psychomotor Domain 2. (P) |
| 1. 1 | 1. Remember | 1. Receive | 1. Imitate |
| 1. 2 | 1. Comprehend | 1. Respond | 1. Execute |
| 1. 3 | 1. Apply | 1. Value | 1. Perform |
| 1. 4 | 1. Analyze | 1. Conceptualize Values | 1. Adaption |
| 1. 5 | 1. Evaluate | 1. Intermalize Values | 1. Neturalize |
| 1. 6 | 1. Create |  |  |

1. \* References: Dyjur, P. (2018). Writing Course Outcomes