ROYAL UNIVERSITY OF BHUTAN

POSITION PROFILE

1. **JOB IDENTIFICATION**

   1.1   Position Title: Assistant Lecturer/ Associate Lecturer/ Lecturer

   1.2   Position Level: PL6/PL5/PL4

   1.3   Occupational Group: Academic

   1.4   College/OVC: College of Science and Technology

2. **MAIN PURPOSE OF THE POSITION:**

   - To carry out teaching and administration works within the Software Engineering Programme.
   - Should be conversant and confident to teach any of the core modules at the Bachelor Degree Level Programme in Software Engineering at any point in time.
   - Should be conversant and confident to teach modules of one of the major specialisations of the following: Software Security/Artificial Intelligence/ Development Security Operations(DevSecOps) at the Bachelor Degree Level Programme in Software Engineering at any point in time.
   - Required to teach two modules, related lab, short courses and workshops every semester.

3. **GENERAL ROLES AND RESPONSIBILITIES**

   ### 3.1   *Teaching*

   - Teach modules (full load) and support students within their subject area at least up to the undergraduate level.
   - Set and mark assessments, and advise students on their progress.
   - Develop and deploy teaching and learning materials in the area of your own expertise.
   - Plan and review your own approach to learning.
   - Take responsibility for organizing own activities and for the management of allocated resources.

   ### 3.2   *Professional Services.*

   - Contribute as resource persons, coordinators or organizers for various professional development activities within the College/University as well as for those outside the University.
   - Participate in developing and promoting a clear vision of the College's/unit's strategic direction;
   - Participate as a team member to support senior colleagues, who have delegated responsibility for specific strands of work/sub-units.

- Contribute to the operation of the University by participating in decision-making and governance including committees or task force as appropriate, at College and/or University level.
- Represent and promote the University externally – nationally and internationally e.g. managing relations with external partners and stakeholders.
- Coordinate the organization of conferences, seminars, workshops and/or working with relevant experts in the area of specialization.
- Take initiatives to improve the University.
- Guide other staff and students.

4. **SPECIFIC ROLES AND RESPONSIBILITIES:**

- Teach modules (full load), workshops, short courses and support students in the area of Software Engineering.
- Set and mark assessments (Continuous, semester-end exams), and advise students through consultations outside of regular contact hours.
- Develop and deploy teaching and learning materials in the area of Software Engineering.
- Participate as a team member to support senior colleagues, who have delegated responsibility for specific strands of work/sub-units.
- The tentative core modules are not limited to the following *(modules highlighted are to be delivered in the upcoming semester)*:
    - o ***Programming Methodology***
    - o ***User Interface Design and Implementation***
    - o Database Systems Fundamentals
    - o Web Application Fundamentals
    - o Server Application Fundamentals
    - o Cross Platform Development
    - o System Design & Solution Architecture
    - o ***Software Testing & Quality Assurance***
    - o ***Software Project Management***
    - o ***Algorithm Design & Analysis***
    - o ***Microservices & Serverless Applications***
    - o Competitive Programming
    - o NoSQL Database Management
    - o Secure Coding Practices

- The tentative Major - Software Security modules are not limited to the following *(modules highlighted are to be delivered in the upcoming semester)*:
    - o Introduction to Cybersecurity
    - o ***Penetration Testing***
    - o ***Foundational Security Operations***
    - o Advanced Web Attacks & Exploitation
    - o Digital Forensics

- The tentative Major - Artificial Intellegence modules are not limited to the following *(modules highlighted are to be delivered in the upcoming semester)*:
    - o Deep Learning Fundamentals
    - o ***Sequence Models***

- o Deep Reinforcement Learning
- o Generative Artificial Intelligence
- o Machine Learning Operations

- The tentative Major - Development Security Operations modules are not limited to the following *(modules highlighted are to be delivered in the upcoming semester)*:
    - o Continuous Integration and Continuous Deployment
    - o ***Scaling, Orchestration, Monitoring & Observability***
    - o Cloud Native Solution Design
    - o Cloud Infrastructure Provisioning & Configuration
    - o Policy Compliance & Vulnerability Management

5. KNOWLEDGE, SKILLS & ABILITIES (KSA) REQUIREMENTS:

5.1 Education:

Bachelor's/ Master's degree in Software Engineering/Information Technology/Information Systems/Information Security/Computer Science/Computer Engineering/ and any other relevant qualifications

Industry certifications in Cloud Computing/ DevOps & Security(Offensive Security) will be of added value.

5.2 Experience:

Industry experience in software engineering will be of added value.

5.3 Knowledge Skills and Abilities:

a. Ability to demonstrate a high level of commitment to teaching
b. Ability to listen and being open to multiple views, perspectives, and feedback
c. Engagement in continuous learning and development, and committed to continuous improvement by recognizing to change personal, interpersonal and managerial behavior.
d. Contribute to the continuous development of the Software Engineering program and pursuing professional development through industrial certifications and workshops.