

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:
 - Programming Methodology
 - User Interface Design and Implementation
 - Database Systems Fundamentals
 - Web Application Fundamentals
 - Server Application Fundamentals
 - Cross Platform Development
 - System Design & Solution Architecture
 - Software Testing & Quality Assurance
 - Software Project Management
 - Algorithm Design & Analysis
 - Microservices & Serverless Applications
 - Competitive Programming
 - NoSQL Database Management
 - Secure Coding Practices
- The tentative Major - Software Security modules are not limited to the following
 - Introduction to Cybersecurity
 - Penetration Testing
 - Foundational Security Operations
 - Advanced Web Attacks & Exploitation
 - Digital Forensics
- The tentative Major - Artificial Intelligence modules are not limited to the following:
 - Deep Learning Fundamentals
 - Sequence Models
 - Deep Reinforcement Learning
 - Generative Artificial Intelligence
 - Machine Learning Operations

- The tentative Major - Development Security Operations modules are not limited to the following:
 - Continuous Integration and Continuous Deployment
 - Scaling, Orchestration, Monitoring & Observability
 - Cloud Native Solution Design
 - Cloud Infrastructure Provisioning & Configuration
 - 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.