

## **POSITION DESCRIPTION**

# The University of Papua New Guinea

<b>DETAILS OF POSITION</b>	POSITION NO.:	121032	
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SCHOOL/OFFICE:	CLASSIFICATION:	U02	
SNPS			
DIVISION/STRAND:	POSITION TITLE:	Tutor/Lecturer in Mathematics	
MSCS			
BRANCH:	IMMEDIATE SUPERVISOR CLASSIFICATION & POSITION:		
UPNG Waigani main campus	Strand Leader, Mathematics, Statistics and Computer Science		
SECTION:	HIGHEST SUBORDINATE CLASSIFICATION & POSITION:		
Academic	Senior lecturers/lecturers in MSCS		
LOCATION: Science III Building			

#### **ROLES AND RESPONSIBILITIES OF POSITION**

#### **PURPOSE**

The University invites applications for the position of Lecturer/Tutor in Mathematics. The sought after candidate for the **Tutor** position should have an experience to teach undergraduate courses Mathematics and participate in curriculum development and course evaluation. Applicants should have at least a Bachelor of Science with Honours (BSc-Hons) degree in Statistics, Mathematics and Computer Science/IT or Mathematics Education with at least three (3) years of teaching experience at the tertiary or higher secondary school level. A teaching qualification will be an advantage but not necessary. They will be expected to participate in research as well as the teaching program for undergraduate courses in mathematics.

Candidates sought for the **Lecturer** position should be a committed academic with expertise in Algebra, Discrete Mathematics or Analysis, but applicants with teaching and research interests in any branch of Pure and/or applied Mathematics will be considered. Proficiency and experience in other areas of mathematics, statistics, and computer science is desirable. The successful candidate is expected to undertake research, consultancy, or further education to develop his/her field of specialization. He/she will have the capacity and interest to participate in innovative teaching methods including flexible delivery and problem base learning (distance education). Proficiency in other areas of mathematics, statistics or computer science and experience in integrating mathematics learning with computer applications is desirable

#### **ACCOUNTABILITIES**

The successful candidate is expected to undertake research, consultancy, or further education to develop his/her field of specialization. The candidate should be enthusiastic, motivated and eager to assist teaching, as well as in his/her further development in teaching for undergraduate programs in Statistics.

### **MAJOR DUTIES (for Tutor Position)**

- 1. TEACHING
  - Conduct tutorials and lab practical sessions
  - Do marking, provide consultations with students and participate in seminars

#### 2. ADMINISTRATION

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Assist course administration as well as various UPNG committees as appropriate

#### 3. RESEARCH

• Prepare for higher studies in the area of mathematics (pure/applied)

#### 4. OUTREACH

Services to the university community as well as student extra-curricular activities

#### 5. DISTANCE EDUCATION

Do teaching, marking of assessments and consulting with students in distance education

### **MAJOR DUTIES (for Lecturer Position)**

#### 6. TEACHING

- Produce, coordinate and conduct lectures (and assessments) for undergraduate courses
- Maintain contact/link with industry

#### 7. ADMINISTRATION

• Assist in school and strand administration as well as various UPNG committees as appropriate

#### 8. RESEARCH

- Conduct research in fields of applied mathematics as well as research in collaboration with external universities
- Encourage and lead junior staff to carry out research
- Publish ethical research results as well as present research papers at public forums within scientific communities

## 9. OUTREACH

- Provide unpaid consultancy and advisory role if required by UPNG/Others
- Conduct short courses as appropriate

### 10. DISTANCE EDUCATION

Develop course material for distance education

## **SELECTION CRITERIA**

## TRAINING LEVEL OR QUALIFICATIONS (for Tutor Position)

FACTORS			
Professional Qualifications	A BSc with Honours degree within mathematics is an advantage		
Abilities	Must be able to work as research assistant while learning research		
	methods for further specialisation in mathematics is essential		
Experience	A number of years of experience in teaching within the field of		
	mathematics as well as some knowledge in using popular		
	mathematical computing tools		
Breath of Skills	Multi skilled in being able to teach across a broad spectrum of lower		
	year courses in order to provide support when required		
Other Skills	Statistics/computing skills is desirable		

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# TRAINING LEVEL OR QUALIFICATIONS (for Lecturer Position)

FACTORS		
Professional Qualifications	Masters in mathematics is preferred	
Publications	Evidence of past publications in reputable international journals and contributions to scientific meetings and conferences	
Abilities	Must be able to teach and conduct research in any field of mathematics is essential and crucial	
Experience	A number of years of experience in teaching and research as well as experience in using popular mathematical computing tools	
Breath of Skills	Multi skilled in being able to teach across a broad spectrum of courses in computer science and computing mathematics in order to provide support when required	
Other Skills	Strong computing skills, able to code in one or two computer languages (not essential), have skills to make contact with government and industry agencies	

## KNOWLEDGE, SKILLS AND PERSONAL ATTRIBUTES

- 1. Knowledge and skills as listed table above.
- 2. Motivated and enthusiastic about these fields and about teaching and research
- 3. Knowledge of the UPNG Code of Conduct

## HISTORY OF POSITION - (HR DIVISION OFFICE USE ONLY)

UPNG FILE NO.	DATE OF VARIATION	DETAILS

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