



POSITION DESCRIPTION

The University of Papua New Guinea

<u>DETAILS OF POSITION</u>	POSITION NO.: 121018
SCHOOL/OFFICE: SNPS	CLASSIFICATION: U02
DIVISION/STRAND: MSCS	POSITION TITLE: Lecturer in Applied Mathematics
BRANCH: UPNG Waigani main campus	IMMEDIATE SUPERVISOR CLASSIFICATION & POSITION: Strand Leader, Mathematics, Statistics and Computer Science
SECTION: Academic	HIGHEST SUBORDINATE CLASSIFICATION & POSITION: Other PhD holders, Senior lecturers/lecturers in MSCS
LOCATION: Science III Building	

ROLES AND RESPONSIBILITIES OF POSITION

PURPOSE

The appointee will be a committed academic with expertise in advanced calculus, differential equations, numerical analysis, and operations research. Appointment to a senior level such as this requires a minimum of 10 years teaching experience and a demonstrated record of achievement and proficiency in research. Applicants must hold a Masters in an area of applied mathematics. The candidate will be expected to participate in research as well as teaching programs for honours and undergraduate courses in their area of expertise. Proficiency in other areas of mathematics, statistics or computer science and experience in integrating mathematics learning with computer applications will be an advantage. In order to be appointed at senior level, an applicant will have an outstanding record in teaching, a demonstrated record of achievement and experience in research. Applicants with a proven record of involvement in the application of mathematics in problems relevant to Papua New Guinea will be considered.

ACCOUNTABILITIES

With assistance from MSCS staff, the candidate will contribute to updating and reviewing applied mathematics courses when required, as well as participate in reviewing other stream courses in mathematics and computer science, that are offered and taught in MSCS, from time to time as necessary to be in par with similar universities around Australia, Oceania and the world.

MAJOR DUTIES

1. TEACHING
 - Present and coordinate undergraduate and postgraduate courses
 - Maintain contact/link with industry
2. RESEARCH SUPERVISION
 - Encourage/motivate/supervise research for honours and postgraduate students in Applied Mathematics
3. ADMINISTRATION
 - Assist in school and strand administration as well as various UPNG committees as appropriate

4. 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

5. OUTREACH

- Provide unpaid consultancy and advisory role if required by UPNG/Others
- Develop course material for distance education
- Conduct short courses as appropriate

6. DISTANCE EDUCATION

- Develop course material for distance education

SELECTION CRITERIA

TRAINING LEVEL OR QUALIFICATIONS

FACTORS	
Professional Qualifications	At least a Masters an area of applied mathematics is required
Publications	Past publications in reputable local and/or international journals and contributions to scientific meetings and conferences preferably
Abilities	Must be able to lead in research in the particular field of applied mathematics specialisation is essential and crucial
Experience	A number of years of experience in research as well as experience in using popular mathematical computing tools
Breadth of Skills	Multi skilled in being able to teach across a broad spectrum of courses in order to provide support when required especially with pure mathematics and statistics courses taught within MSCS
Other Skills	Strong pure mathematics/computing skills is desirable

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