

POST-GRADUATE PROGRAMME IN PEATLAND MANAGEMENT

1. ASSESSMENT OF MARKET NEEDS

1.1 Forms: Attached

1.2 Notes on the level of of the proposed education programme

The opinion of Malaysian Department of Higher Education is that this capacity building academic programme is very much ‘vocational’ and ‘terminal’ in nature. Such programme is better categorised as an advanced vocational training programme as it would suit graduates and mid-career professionals whose job specifications include management of peatland ecosystem or its component, directly or indirectly.

It is also considered as a terminal programme (ends there) in view of the limited depth of academic coverage vis-à-vis the requisites for a doctoral study. The multidisciplinary characteristics of the programme would deliver the breadth excellent for vocational purposes, but it would neither allow for in depth scientific nor engineering discourse because of the limited period of exposure to the core subjects, and the latter cannot be dealt with in sufficient depth i.e. not beyond the grasp of students who are expected to come from various scientific and engineering backgrounds.

Given the aforementioned ‘guidance’ by the Ministry of Education, Unimas decides to present to respondents a proposal for a study programme leading to Postgraduate Diploma in Peatland Management.

2. INVENTORY OF EXISTING CURRICULA

2.1 At Unimas

The existing academic programme similar to the proposed programme is the M. Env. Sc. Programme in Land Use and Natural Resource Management (SLUSE). SLUSE is a capacity building academic programme for the promotion of sustainable land use and natural resource management. SLUSE Programme is a coursework masters programme comprising of 12 months of lectures and 4 months of dissertation works. The focus of the programme is on land use and water resource management. It consists of 13 courses from three modules: Interdisciplinary Module, Experiential Module and Core Module. The courses offered are:

- JSM1 Ecological System: Concept & Issues (3 Credits)
- JSM2 Land Use and Natural Resource Management (3 Credits)
- JSM3 Tropical Forestry and Agricultural System (3 Credits)
- JSM4 Applied Environmental and Resource Economics (2 Credits)

- JSM5 Monitoring Using Earth Observation (Eo) and GIS (4 Credits)
- JSM6 Environmental Management Instruments and Systems (4 Credits)
- JEM1 Interdisciplinary Methodology (4 Credits)
- JEM2 Interdisciplinary Field Work and Report/Project Paper (5 Credits)
- CML1 Ecological Science (3 Credits)
- CML2 Green Management and Technology (3 Credits)
- CML3 Sustainable Soil Resource Management (3 Credits)
- CML4 Water Resource Management (5 Credits)
- CML5 Research Project (Dissertation) (10 Credits)

The SLUSE programme has to date produced 49 graduates from 2 cohorts. The 3rd cohort of 24 students are currently finishing their study. A ‘selling point’ unique to SLUSE is that the 2-week field course component is always conducted jointly with the masters student counterparts from SLUSE programme in Denmark.

2.2 At Other Local Institutions

Masters degrees in water resources and environment-related programmes are offered by the following institutions:

- UTM - Water Resource Engineering; Env. Engineering
- UKM - Environmental Management; Env. and Development
- UPM - Sustainable Land Resource Management, Masters in Env. Science.
- UM - Environmental Technology
- Unimas - Sustainable Land Use and Natural Resource Management
- UNITEN - Environmental Management
- UNITEM - Integrated Water Resources Management (IWRM, to be launched shortly)

As indicated, none of these existing programmes overlaps with the proposed Programme in terms of specificity to peat ecosystem.

3. INVENTORY OF EXISTING ACADEMIC INFRASTRUCTURE AND RESOURCES

Unimas commitment to the development and implementation of taught and post-graduate programmes has been well sustained since its establishment 10 years ago. The academic programme at Unimas is offered by eight faculties, complemented by five research institutes through their research activities.

There are 430 academic staff of various disciplines at Unimas. Among these, The number of academic staff that are directly relevant to the proposed PEATWISE Programme are about 15. They would be sourced from five different faculties and one research institute, namely:

- Institute of Biodiversity and Environmental Conservation (IBEC)
- Faculty of Resource Science and Technology (FRST)
- Faculty of Social Sciences (FSS)
- Faculty of Engineering (FE)
- Faculty of Information Technology (FIT)
- Faculty of Economics and Business (FEB)

The present Unimas campus has the necessary infrastructure to cater for about 5500 students. The facilities available in the campus include a library (Centre for Academic Information System, CAIS), science, engineering, medical and language laboratories, and an excellent IT network. The Phase I development of Unimas Permanent Campus (which is currently under construction) is capable of accommodating about 10 000 students,

Academic Support Facilities

The proposed programme is to be hosted by the Faculty of Resource Science and Technology (FRST). The spacious permanent building for FRST is expected to be completed in August 2004, in time for the first intake of PEATWISE students. The new faculty block and the existing and newly acquired facilities include:

- Office and Classroom
- Teaching Aids (AV equipment, reprographic facilities etc)
- Field Work Support Facilities (Water quality (HACH) kit, hydraulic modelling package, hydrolab surveyor and data logging system, GPS, flow meters, depth finders etc.)
- Research and Laboratory Facilities [soils laboratory, chemistry laboratory, GIS laboratory, water quality laboratory, hydrology lab (at the Engineering Faculty) , museum and herbarium facilities, maps & satellite images, PCs and Arc view licenses]
- IT support Facilities (including LAN)

Academic Information Reference Facilities

Unimas Centre for Academic and Information Services (CAIS) provides a comprehensive infrastructure of computer services to enable access to information and bibliographic collections. Registered students and staff will have access to a wide range of information and reference materials and computing services.

Resource Persons (tentative)

Prof Dr Murtedza Mohamed – Centre for Technol Tranfer & Consultancy
 Assoc Prof Dr Lau Seng – Fac of Resource Science & Technology
 Assoc Prof Dr Dimbab Ngading – Fac of Social Science
 Prof Salim Said – Fac of Engineering
 Assoc. Prof. Dr. Frederik J. Putuhena - Fac. of Engineering
 Assoc Prof Dr Hamsawi Sani - Fac of Resource Science & Technology

Dr Gabriel Tonga Noweg – Fac of Social Science
Prof Wan Sulaiman Wan Harun - Fac of Resource Science & Technology
Dr Nabil Bessaih – Fac of Engineering
Dr Lee Nyanti - Fac of Resource Science & Technology
Dr Petrus Bulan - Fac of Resource Science & Technology

Possible Guest Lecturers

Dr Tie Yiu Liong (Agrosol Sdn Bhd, Sarawak)
James Dawos Mamit (Natural Resource & Environment Board, Sarawak)
Yogeswaran Mailvaganam (Geological Survey Department –rtd)
Counterparts from Wageningen University

Reference Materials (tentative)

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