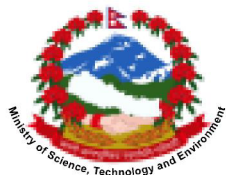




Master of Science in Natural Resources Management (M. Sc. NRM)

CURRICULUM

Faculty of Science and Technology
Pokhara University
2014



POKHARA UNIVERSITY

MASTER OF SCIENCE IN NATURAL RESOURCES MANAGEMENT

1. Program Objective

The Master of Science in Natural Resources Management program is designed to provide students adequate knowledge and skills to be competent natural resource managers, executives, or entrepreneurs capable of becoming strategic change agents in the corporate and social field. The program focuses on integrated and multidisciplinary approach in developing social and resource management outlook and adequate skill in analysis, decision making, implementation, leadership, and communication.

The specific objectives of the program are as follows:

- to provide students a firm grasp on integrated and multidisciplinary fundamentals of natural resources management with real life applications, and
- to develop students to become professional managers who can effectively manage natural resources in a highly dynamic, and livelihood dependent environment with conflicting demands.

2. Curricular Structure

The curriculum is designed to equip students with the competencies, knowledge, skills, and attitudes needed for success in natural resources management positions. The course work gives students a broad and holistic view of the complexity of issues in today's natural resources management environment. The curriculum comprises the following five distinct components:

- **Foundation & Analytical Courses:** The foundation and analytical courses provide the necessary academic background and analytical tools for Master of Science (M.Sc.) study.
- **Core and Functional Courses:** The core and functional courses provide students with the behavioral skills, ana-

lytical tools, and environmental considerations necessary for making decisions in a natural resources management institution.

- **Capstone Courses:** The capstone courses require students to integrate the skills and knowledge they have acquired in various functional areas of natural resources management and apply them in making decisions.
- **Electives:** The objective of elective courses is to provide flexibility to the students in selecting courses in which they have special interest, particularly to meet their career objectives.
- **Thesis:** The students are required to undertake a research project that involves fieldwork and/or empirical analysis of the information collected from the field. Students are also required to prepare a thesis of the research project in a prescribed format.

3. Program Features

The features of the M.Sc. Natural Resources Management program are competitive learning environment, market-driven courses, and program flexibility. The M.Sc. Natural Resources Management is a two-year program spread over four semesters. A student needs to successfully complete 45 credit hours of course work and 15 credit hours of research project.

The regular M.Sc. program is to be completed within four semesters. The duration of each semester will be 15 weeks excluding semester end examinations.

The program will use a range of pedagogical inputs that include on-campus learning through classroom discussions, presentations, group work, case analysis and guest lecture series, and off-campus learning through field visits and research project work.

4. The Semester System

In the program, each course has a certain number of cred-

its assigned to it depending on its lecture, tutorial and practical work hours in a week. One lecture hour per week per semester is assigned one credit. That is, for a theory course, a three credit hour course has 45 contact hours in a semester.

The prominent features of the semester system are the process of continuous evaluation of students' performance and the flexibility to allow the students to progress at a pace suited to his/her individual ability, course to the regulation of credit requirements.

5. Entry Requirements and Admission Procedures

Eligibility

Graduates from relevant field of engineering, and natural and applied science are eligible to join the program. However, the applicant must have minimum of 15 years formal education (12 years of schooling plus three years of undergraduate). Furthermore, the applicant must have secured a minimum CGPA of 2.0 or 45 percent in undergraduate level.

Documents Required

The applicant for this program is required to submit the following documents with the application form made available by the concerned college by paying a predetermined fee:

- Completed and signed application form
- Official transcripts from all the academic institutions attended
- Certificate of experience

Certificates of all degrees and experience should be photocopied and submitted with proper attestation. Enrollment is conditional upon completion of all admission formalities including payment of all fees as determined by the college. Incomplete applications shall not be processed.

Admission procedures

A notice inviting applications for admission is publicly announced. Application forms and information brochures are provided, on request, after the payment of the prescribed fee. The eligible candidates are informed to take the entrance test which they must pass. The date and time for the entrance test are informed to the applicants by the concerned colleges.

Final selection of students will be made on the basis of their performance in the entrance test, numbers of years of experience and their achievements in the qualifying (for admission) examination. A college may, however, modify the selection procedure to suit its needs with prior approval of the Dean of the Faculty of Science & Technology.

The candidates who are given provisional admission under special condition are required to submit all necessary documents within a month of the beginning of regular classes. Otherwise, the admission will be canceled.

6. Academic Schedule and Course Registration

The program consists of four semesters. However, admission to the program will only be given twice a year as per the schedule published by the college.

Students are required to register courses at the beginning of each semester. Since registration is a very important procedural part of the credit system, all students must present themselves at the college for registration. Registration in absence may be allowed only in rare cases at the discretion of the Principal of the concerned college. A student's nominee cannot register for courses but will only be allowed to complete other formalities.

7. Addition and Withdrawal from Courses

A student would have the option to add or drop from a course. This can, however, be done only during the first two weeks of the semester. A student wishing to withdraw from a course should apply on the prescribed form within two weeks from the starting date of the semester.

8. Attendance Requirements

The students must attend every lecture, tutorial and practical class. However, to accommodate for late registration, sickness and other contingencies, the attendance requirements will be a minimum of 80% of the classes actually held. Students will get NOT QUALIFIED (NQ) status if s/he fails to maintain 80% attendance in any course.

9. Normal and Maximum Duration of Study

The normal duration and the maximum duration for the completion of the requirements for this programs are as follows:

Normal duration: 24 months (4 semesters)

Maximum duration: 4 + 1 years from the date of registration.

(All the courses have to be completed within 4 years, and additional 1 year can be given for thesis work on special request upon the approval of concerned authority.)

10. Evaluation System

A student's academic performance in a course is evaluated in two phases as:

- Internally by the concerned faculty member and
- Externally by the office of the Controller of Examinations through semester-end examinations.

A sixty percent weight is given to internal evaluation and forty percent weight is given to external evaluation. The pass marks for both the internal evaluation and external evaluation is sixty percent. A student must qualify in both

evaluations separately to get a pass grade in a particular course. The final grade awarded to a student in a course is based on his/her consolidated performance in both internal and external evaluations.

The internal evaluation may consist of various components like project works, quizzes, presentations, written examinations, reflection notes preparation, and the like. A student will get NOT QUALIFIED (NQ) status in the internal evaluation if his/her performance falls below the minimum requirement. Such students will not be allowed to appear in the semester-end examination of the particular course.

11. Grading System

The Pokhara University follows a four-point letter grade system. The letter grades awarded to students will be as follows:

Letter Grade	Grade Point	Description
A	4.0	Excellent
A-	3.7	
B+	3.3	Good
B	3.0	Fair
B-	2.7	
C+	2.3	
C	2.0	Pass in individual course
F	0.0	Fail

If a student cannot finish all the assigned works for a course, he/she will be given an incomplete grade 'I'. If all the required assignments are not completed within the following semester, the grade of 'I' will automatically be converted into 'F'.

The performance of a student is evaluated in terms of two indices: (a) Semester Grade Point Average (SGPA) which is the grade point average of the particular semester, and (b) Cumulative Grade Point Average (CGPA) which is the grade

point average of all the semesters.

$$\text{SGPA} = \frac{\text{Total honor points earned in a semester}}{\text{Total number of credits taken in a semester}}$$
$$\text{CGPA} = \frac{\text{Total honor points earned}}{\text{Total number of credits completed}}$$

where,

Honor point = Grade point earned in a course x Number of credits assigned to that course.

12. Degree Requirements

To graduate from the M.Sc. program, a student should have

- 'C' or better grade in each of the courses as specified in the curricular structure section;
- Completed all the courses, and research project work as specified in the curricular structure section within the maximum time period specified in the normal and maximum duration of the study section; and
- A final CGPA of 3.0 or better on the University's 4.0 grade scale.

13. Distinction and Dean's List

A student who obtains a cumulative CGPA of 3.75 or better will receive the M.Sc. degree with distinction. The Dean's list recognizes outstanding academic performance in the program. To qualify to this list, a student must have a CGPA of 3.80 or better.

14. Repeating a Course

A course may be taken only once for grade. Since passing of all courses individually is a degree requirement, students must retake the failing course when offered and must successfully complete the course. A student will be allowed to retake maximum of two courses to achieve a minimum CGPA of 3.0. The grade earned on the retake examination

will substitute the earlier grade earned by the student in that course. A student can retake a course only when it is offered by the college/university.

15. Credit Transfer and Withdrawal

A maximum of 25% of the total credit hours of course work completed by a student in an equivalent program of a recognized university/ institution may be transferred/ waived for credit by the Dean on the recommendation of the Principal/head of the school/college. However, for such transfer of credit, a student must have received a grade 'B' or better in the respective course. Courses taken more than two years earlier than the date of application will not be accepted for transfer of credit.

Credit transfer will also be allowed from different programs of Pokhara University. In such cases, all credits earned by students in compatible courses with a minimum grade of B may be transferred to the new program.

The student may apply for withdrawal from the entire semester only on medical grounds. However, partial withdrawal from courses registered in a semester will not be considered.

16. Unfair Means

The following would be considered as adoption of unfair means during examination:

- Communicating with fellow students for obtaining help,
- Copying from another student's script/report/paper,
- Copying from disk, mobile phone, palm of hand or other incriminating documents and equipment,
- Possession of any incriminating documents, whether used or not,
- Any approach in direct or indirect form to influence teacher concerning grade, and

- Unruly behavior which disrupts conduction of examination.

If an instructor detects a student using unfair means, the student may be given an 'F' grade at the discretion of the Examination Board. Adoption of unfair means may result in the dismissal of the student from the program and expulsion of the student from the college and as such from the Pokhara University.

17. Dismissal from the Program

A student is normally expected to obtain a GPA of 3.0 in the semester-end examinations of the M.Sc. program. If a student's performance falls short of maintaining this CGPA continuously over the semesters, he/she may be advised to leave the program or dismissed from the program.

18. Detailed Curricular Structure

Students of the M.Sc. Natural Resources Management are required to successfully complete 15 courses (equivalent to 45 credit hours), and a research project (equivalent to 15 credit hours) as per the curricular structure.

The first semester is focused on developing the foundation required for learning the core/functional area and integrative courses.

Curricular Structure

Semester I		
Course Code	Course Title	Credit hour
NRM 511	Natural Resources System	3
NRM 512	Climate Change in Natural Resources Management	3
NRM 513	Ecology and Ecosystem Management	3
STT 505	Statistical Analysis	3
NRM 514	Energy Resources & Environment	3
Semester II		
Course Code	Course Title	Credit hour
NRM 521	Natural Resources Governance and Policy	3
ENV 511	Environmental Assessment and Auditing	3
NRM 522	Natural Resources Economics	3
NRM 523	Geospatial Techniques in Natural Resources Management	3
	Elective-I	3
Semester III		
Course Code	Courses Title	Credit hour
NRM 611	Integrated Watershed Management	3
RCH 601	Research Methodology	3
MGT 611	Program Planning & Management	3
NRM 612	Society, Livelihood and Participatory Development	3
	Elective-II	3
Semester IV		
Course Code	Courses Title	Credit hour
NRM 691	Thesis	15

Curriculum Development Center

Pokhara University

Lekhnath-12, Dhungepatan, Kaski, Nepal

P.O. Box: 427

Tel/Fax: +977-61-561789

E-mail: curriculum@pu.edu.np

Web: pu.edu.np