CHINLONE

Co-funded by the Erasmus+ Programme of the European Union

DELIVERABLE 2.2

WP – MANAGEMENT PLATFORM

MODEL FOR THE ANALISYS OF A DEGREE PROGRAMME AND ITS QUALITY MONITORING

ACCORDING TO A STUDENT-CENTRED APPROACH TAILORMADE FOR MYANMAR UNIVERSITIES

1. University: Yangon University of Economics

2. Department: Department of Statistics

3. Name of the Degree Programme: Master of Applied Statistics(MAS)

4. Level of the Degree Programme (BA or MASTER): Master

5. Total number of Course Units in the Degree Programme: 18 Course Units

6. Amount of teaching hours for each Course Unit in the Degree Programme: 48 teaching hours

7. Total number of students of the Degree Programme: 49 - First Year Students

48 - Second Year Students

8. Number of teaching staff: 43

9. Composition of teaching staff (from assistant lecturer to professors): 2 Tutors, 10 Assistant Lecturers, 26 Lecturers, 2 Professors

10. Teachers' workload (es. how many course units can hold one teacher? how many hours of lessons in one semester/year for one teacher?): Teachers' workload is not the same. Some teachers hold four (or) five course units in one Semester.

11. Goals of the programme (as it is now in the programme description published in the website):

1. To enhance leadership qualities and competencies for professional career in statistics with emphasis in handling large data sets
2. To develop effective use and analysis of statistics in management decision-making
3. To advance acquisition of skills in using statistical tools and techniques in instruction, research and extension

12. Key Degree Programme competences

By competence we mean a quality, ability, capacity or skill that is developed by and that belongs to the student.

Tips for writing*:*

Please identify generic and specific competences for the Degree Programme. The competences should reflect an area of capability in relation to the identified level (e.g. Bachelor, Master).

You can check a possible list of generic competences here:
http://www.unideusto.org/tuningeu/competences/generic.html

For specific competences, you can check here:
http://www.unideusto.org/tuningeu/competences/specific.html

Doing this excise, please consider, identify, and describe the potential fields in which your graduates may typically find employment in Myanmar. Don't forget to identify the programme's contribution to develop citizenship and personal culture of a graduate.

Generic:

1. Ability to show awareness of statistics literacy and statistical knowledge
2. Ability to apply the acquired knowledge in real world problems
3. Ability to make the evidence based decision
4. Ability to undertake research in various fields of studies
5. Ability to write research reports systematically
6. Ability to fulfill the much needed human resource requirements of statistical units at various ministries

Subject specific:

1. Ability to understand the statistical theories and concepts
2. Ability to apply the acquired statistical knowledge in real situations
3. Ability to conduct research in their respective field of specializations
4. Ability to write research reports

13. Degree Programme learning outcomes (PLO)

Learning outcomes are statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of learning.

Tips for writing:

1) Incorporate or reflect the institutional and departmental missions;
2) Check whether learning outcomes meet the requirements/standards or expectation of board requirements, benchmark statements and other external reference points;
3) Make sure that they address all the competences you want to develop;
4) Concentrate on overarching knowledge and skills of the programme rather than an individual course unit;
5) Focus on what you expect your graduates to learn as a result of their study experience in terms of knowledge, abilities and attitudes;
6) Make sure that learning outcomes are in line with the courses in the programmes and you have the means to reach them. Note any gaps or areas for improvement.

After finishing the degree programme, students will be able

1. to understand the theories and concepts which are related to specific subjects.

2. to apply the acquired statistical knowledge in real situations

3. to use the statistical tools efficiently in data analysis

4. to advance acquisition of skills in using statistical tools

5. to make evidence based decision making

6. to be able to lay down the policy for development of organizations

7. to conduct researches in various fields

14. Course Unit learning outcomes

Tips for writing:

1) Include all the courses units of the programme.
2) Construct appropriate learning outcomes at course unit level, bearing in mind how these might combine to fulfil a Programme learning outcomes and how they will be achieved. Be particularly aware of where, and how, Generic competences are addressed;
3) Limit course learning outcomes to 5-8 statements;
4) Focus on overarching knowledge/skills, not on the details that are central to the course (look at course goals);
5) Make sure that statements are student-centred;
6) Focus on results and not activities.

Course unit title	Course unit learning outcomes
MAS 111: Descriptive Statistics	Can realise the basic concepts for analysis of univariate data and basic concepts of probability theory and handle the large data sets.
MAS 112: Official Statistics	Can understand the key areas of Official Statistics and apply statistical methods useful in generating Official Statistics.
MAS 113: Principles of Economics	Can examine the fundamental economic concepts and cover the framework to understand the microeconomics and economic decision making of individuals and firms in market setting.
MAS 121: Inferential Statistics	Can apply the knowledge of inferential statistics in Applied research.
MAS 122: Population Statistics	Can understand the basic demographic data analysis and apply it to estimate the population for future.
MAS 123: Qualitative Data Analysis	Can understand the methods for qualitative data analysis and apply these methods for empirical research.
MAS 131: Design and Analysis of Experiments	Can apply these knowledge to agricultural and bioscience analysis.
MAS 132: Operations Management	Can identify, develop and understand of the major problem in the design, planning and control of productive system and illustrate the independence between production/ operations and decisions and other areas of management.

MAS 133: Decision Theory and Analysis	Can focus on the theories and methods of statistical decision and make decision based on condition of different situations namely certainty and uncertainty.
MAS 141: Time Series Analysis and Forecasting	Can understand univariate forecasting methods and realize how to describe, control and predict based on time series modeling.
MAS 142: Survey Operations	Can understand the basic concepts of planning a survey; sample design and sample size, frame construction; tabulation plans; preparation of questionnaires and manual of instruction; field operations; processing of data, preparation of report.
MAS 143: Financial Statistics	Can understand the principles of Actuarial Statistics and compare simple interests and compound interests and discounts, ordinary annuities certain, and different types of annuities. Amortization and sinking funds. Financial ratio analysis.
MAS 211: Econometric Methods and Applications	Can understand the concepts and theories of economics and understand how to build the macroeconomic and microeconomics models to make planning.
MAS 212: Applied Non-parametric Methods	Can focus on the theories and methods of making statistical inference based on nonparametric statistical techniques and apply it in social and economic data.
MAS 213: Survey Design	Can emphasize on practical applications of some sampling designs in survey methodology.

MAS 221: Multivariate Analysis	Can examine the several useful multivariate techniques for data reduction, sorting and grouping investigation of the dependence among variables and able to realize the knowledge for making proper interpretations, selecting appropriate techniques and understanding their strengths and weaknesses as well as apply computer package in multivariate data analysis.
MAS 222: Optimization in Operations Research	Can understand the deterministic and stochastic models in operations research and use linear and quadratic programming and simulation models.
MAS 223: Environmental Impact Analysis	Can understand the issues and challenges of environment and get knowledge of some environmental problems and realize how to use environmental indicators in Disaster management.

15. Students' learning approaches, teaching approaches and assessment methods

Tips for writing:

Consider all Course Units and describe students activities (e.g. reading of assigned bibliography, participation in the seminars, presentation of information, working in groups, ….etc.), teaching approaches (lectures, seminars, excursions, …), and assessment methods separately. Describe them as they are now.

Course Units Names	Students' learning approaches	Teaching approaches	Assessment methods
MAS 111: Descriptive Statistics	Attending the class and participation in Seminar, project assignment	Lectures, seminar	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment 20%
MAS 112: Official Statistics	Attending the class and participation in Seminar, presentation of group work project assignment	Lectures, seminar and short trip to line ministries (CSO)	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment/ Project paper presentation 20%
MAS 113: Principles of Economics	Attending the class and participation in Seminar, presentation of group work	Lectures, seminar and group presentation	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment/ Project paper presentation 20%
MAS 121: Inferential Statistics	Attending the class and do assignment	Lectures	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment 20%
MAS 122: Population Statistics	Attending the class and participation in Seminar, presentation of group work project assignment	Lectures, seminar	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment/

			Project paper presentation 20%
MAS 123:Qualitative Data Analysis	Attending the class and participation in Seminar, presentation of group work for project assignment	Lectures, seminar	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment/ Project paper presentation 20%
MAS 131: Design and Analysis of Experiments	Attending the class and participation in Seminar, project assignment	Lectures, seminar	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment/ Project paper presentation 20%
MAS 132: Operations Management	Attending the class and presentation of group work for project assignment	Lectures and group discussions	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment/ Project paper presentation 20%
MAS 133: Decision Theory and Analysis	Attending the class, and project assignment	Lectures	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment 20%
MAS 141: Time Series Analysis and Forecasting	Attending the class and participation in Seminar, presentation of group work for project assignment	Lectures, seminar and group assignments	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment/ Project paper presentation 20%

MAS 142: Survey Operations	Attending the class and participation in Seminar, presentation of group work for project assignment	Lectures, seminar and short field trip	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment/ Project paper presentation 20%
MAS 143:Financial Statistics	Attending the class and participation in Seminar, assignment	Lectures, seminar	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment 20%
MAS 211: Econometric Methods and Applications	Attending the class and participation in Seminar, project assignment	Lectures, seminar	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment/ Project paper presentation 20%
MAS 212: Applied Non-parametric Methods	Attending the class and assignment	Lectures	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment 20%
MAS 213: Survey Design	Attending the class and participation in Seminar, field work and presentation	Lectures, seminar and field trip	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment/ Project paper presentation 20%
MAS 221: Multivariate Analysis	Attending the class and group work assignment	Lectures, group discussion	Final Examination 50% Mid-Term Test 20%

			Attendance 10% Assignment 20%
MAS 222: Optimization in Operations Research	Attending the class and group work project assignment	Lectures	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment 20%
MAS 224: Environmental Impact Analysis	Attending the class and participation in Seminar, presentation of group work project assignment	Lectures, seminar and presentation	Final Examination 50% Mid-Term Test 20% Attendance 10% Assignment/ Project paper presentation 20%
MAS 225: Thesis and Viva Voce	Writing thesis, submitting thesis, thesis defense	Supervising the research, discussion with learners	Organization of the Thesis 20% Originality, creativity 20% Contribution of research outcome to Academic 20% Presentation 20% Response to questions 20%

16. Mapping Student Performance.

Tips for writing:

1) Provide the numbers/indicators as indicated in the table (students' enrollment and students' curriculum career). If it is not possible, just explain why in the „description of the data" column.
2) Provide a description of the data (es. student drop out), iindicate the source (e.g. University's student records) and describe briefly how the data has been collected and stored (e.g. student's registration form and University's archives).

		Data	Description of the data	Source and information on how the data has been collected and stored
Students' enrollment data	51 students enrolled in 2017 Academic Year 50 students enrolled in 2018 Academic Year	• First year MAS (2018) • Second year MAS (2017)		**Student registration record from office of department of Statistics**
	Add at least one more available data about students' enrollment	NGOs, INGOs, Government Staffs from Central Statistical Organization(CSO), Business owners, Researchers		
Students' career progression data	**Exams passed and average grade** **48 Second year students are passed and 3 students are dropout in 2017 Academic Year**	• First year MAS (2018) Average grade: 4 • Second year MAS (2017) Average grade: 4	**As a government staffs, they transferred from Yangon Region to others Regions when they were studying in MAS Programme.**	**Student registration record from office of department of Statistics**

	49 First Year students are attending and a student is dropout in 2018 Academic Year			

17. How to create a satisfaction questionnaire for target groups.

Identitify specific issuse that you want to map (es. student‘s satisfaction of course teaching methods or teacher‘s workload or graduates employability)

TARGET	**ISSUES**	**Questions**
STUDENTS	Teaching methods and quality of the teaching	Do you enjoy learning activities such as reading reference books, taking lectures, participating in group discussions and group work project, and taking part in presentation and seminars and in field excursion? Do you think the course objectives are congruent with the curricula? Do you think that the intellectual level of the course is appropriate for the enrolled students?

		Do you think that you can learn best through these activities? Which activities enhance your best learning and why? Do you believe that your teachers are experts in their specialized subjects? Why do you think so?
	Course units	Do you think that the aims of the course are sufficiently clear? Do you feel that the course outlines and topics are sequenced logically? Do you think the course contents are coherent and cover the objective of the course? Do you support time allocation to the course topics is appropriate? Do you feel the contexts of the course and course materials are up to date? Do you agree the course assignments and lectures usefully complemented each other?

		Do you agree the amount of projects and assignments is appropriate to the course level and to the number of credit hours for the course? Do you think the course assignments are intellectually challenging to the students? Do you think course units that you learnt in this programme are useful in your workplace? Which course units do you think will be the most useful for you and why? Which course units do you think will be the least useful for you and why?
TEACHING STAFF	Workload	Are you satisfied with allocation of workload in your department?
	Salary	Are you satisfied with your salary? Is it reasonable or too high or too low for you?
	Promotional opportunities	Are you satisfied with your promotional opportunities in your department?

	Specialized subject area	Are the course units that you teach in this programme and your specialized research areas or your specialized subject areas are much related or not? Are you satisfied with this situation and why?
	Vacation	Have you got any vacation as a teacher who involves in this programme? Are you satisfied with it and why?
	Reward	Do you wish to receive any reward from your department or your university for your great performance or your great efforts in this degree programme?
	Teaching facilities	Are you satisfied with teaching facilities such as up to date text books, ICT facilities which are provided in your department or your university?
GRADUATES	Role of professional	Are there many job opportunities for MAS degree holders in their respective organizations such as NGOs, INGOs and government?

	Life-long learning	Do you want to attend other courses which are offered by Department of Statistics at Yangon University of Economics? Why?