

MEMORIAL UNIVERSITY OF NEWFOUNDLAND
Academic Council of the School of Graduate Studies
Minutes, Meeting of October 21, 2019

PRESENT: D. Farquharson (Acting Chair), A. Keeling, T. MacKenzie, P. Coady, E. Haven, R. Shannahan, R. Joy, J. Rodway, C. Badenhorst, T. Norvell, D. Howse, J. Shea, A. Dorward, H. Liu, A. Variyath, A. Lang, C. de Boer, V. Kavanagh, A. Beardsworth, M. McKibbin, A. Kim, S. Khalil

Guests: H. Carnahan and C. Walsh (to speak to item 6.a)iv of the agenda)

APOLOGIES: A. Surprenant, V. Campbell, D. Moralejo, E. Pittman, S. Cadigan, R. Gosine, M. Cheema, C. Bottaro, F. Khan

1. MINUTES

It was moved by D. Farquharson and seconded by D. Howse, that the minutes of the meeting held September 16, 2019, be approved as circulated. The motion

CARRIED

2. BUSINESS ARISING

3. CORRESPONDENCE

4. DEAN'S REPORT/REPORT OF SENATE

- a) The regular meeting of Senate on October 8, 2019, was cancelled. Therefore, items from the September Council and October Council meetings will be considered at the next regular meeting of Senate November 12.

5. REPORT OF THE GRADUATE STUDENTS' UNION

- a) The GSU reported the following three new services that are available:
- MUN Safe transportation
 - Taxi-accessible transportation
 - SBDT – discount with driving school for license
- b) The GSU is working on the facilities and hiring of new staff
- c) Work continues with W/CFS, MUNSU and Greenshield regarding the Health and Dental Insurance.

6. a) Academic Council Executive
- i. School of Science and the Environment – Boreal Ecosystems and Agricultural Science – New Course and Calendar Revisions

The School of Science and the Environment, Grenfell Campus is requesting approval to regularize special topics course BEAS 6052. This will require the addition of this course to regulation 28.5 of the University Calendar.

It was moved by P. Coady and seconded by A. Bearsworth that the proposed new course and calendar revisions be approved. The motion

CARRIED

28.5 Courses

- BEAS 6000 Issues in Boreal Ecosystems and Agricultural Sciences
- BEAS 600A/B Graduate Research Seminar
- BEAS 6002 Advanced Quantitative Research Methods for the Natural Sciences
- BEAS 6003 Advanced Quantitative Research Methods for the Social Sciences
- BEAS 6010 Agriculture and Forestry Economics
- BEAS 6020 Management of Crop Nutrition
- BEAS 6021 Organic Farming for Sustainable Agriculture
- BEAS 6022 Plant Biochemistry
- BEAS 6023 Plant Physiology
- BEAS 6030 Chemical Speciation Modeling for Environmental Matrices
- BEAS 6031 Soil Functions Soil as a Bioreactor
- BEAS 6032 Environmental Soil Physics
- BEAS 6033 Soil and Water Conservation
- BEAS 6040 Advanced Groundwater Management
- BEAS 6041 Applied Hydrology
- BEAS 6042 Soil and Groundwater Remediation
- BEAS 6050-6150 Special topics in Boreal Ecosystems and Agricultural Sciences (excluding 6052)
- BEAS 6052 Statistical Model Building in Boreal Ecology

BEAS 6052 – Course Description

This course is offered to meet the needs of students with ecology-focused research topics. It provides an intensive examination of statistical modelling approaches, tailored to the students' research projects. Future students and their supervisors would benefit from this being available as a regular course, to provide both an alternative to the available agriculture-focused courses and experience with statistical Modelling.

- ii. Master of Technology Management Program – Calendar Revisions

The Academic Director, Master of Technology Management program requests approval of calendar revisions to section 33 of the University Calendar, and secondary changes to sections

18 and 19 of the calendar, which deals with the composition of the Academic Advisory Committee; revision to the admission requirements; changes to titles of courses and approval of two new courses; and the change of some course prefixes from MSTM to TECH.

It was moved by P. Coady and seconded by A. Keeling that the proposed revisions be approved.
The motion

CARRIED

33 Regulations Governing the Degree of Master of Technology Management

www.mun.ca/sgs/contacts/sgscontacts.php
www.mi.mun.ca

33.1 Administration

The Program will be administered by an Academic Director appointed by the Associate Vice-President (Marine Institute), Academic & Student Affairs, together with an Academic Advisory Committee.

An Academic Advisory Committee will be appointed by the Dean of Graduate Studies on recommendation of the Associate Vice-President (Marine Institute), Academic & Student Affairs. This committee will consist of the Academic Director as Chair, three members from the Marine Institute and two members from other academic units of the University, normally the Faculty of Business Administration and the Faculty of Engineering and Applied Science. Normally, all appointments will be for a period of three (3) years.

A Technical Advisory Committee consisting of a cross-section of members with professional expertise related to the technology sector, will provide regular feedback on program content, instruction, and future direction of the Program. Members of this Committee will be appointed by the Dean of Graduate Studies on recommendation of the Associate Vice-President (Marine Institute), Academic & Student Affairs. The Academic Director will be an ex officio member and Chair of the Technical Advisory Committee. Normally all appointments will be for a period of three (3) years.

33.2 Program

The Master of Technology Management (MTM) is a comprehensive academic program that provides a broad understanding of the structure and operation of organizations and the factors that influence business decisions in the context of technology-based organizations. It provides a technology management focus through the development of knowledge and understanding of the nature of technical operations and the factors that have an impact on their success, as well as the ability to apply these concepts within their organizations.

The program consists of two Options:

- Engineering Technology and Applied Science Option
- Aquaculture Technology Option

The program is offered online and requires successful completion of either 1) 24 credit hours of course work and a comprehensive project and report (6 credit hours), or 2) 30 credit hours of comprehensive course work. Students will typically register on a part-time basis.

33.2.1 Admission Requirements

Admission to the program is on a competitive basis.

1. To be considered for admission to the Engineering Technology and Applied Science Option an applicant will normally possess a second class or better undergraduate degree from a university of recognized standing and will normally have:
 - appropriate technology sector and business management course work; and
 - a minimum of two (2) years relevant employment experience.
2. To be considered for admission to the Aquaculture Technology Option an applicant will normally possess a second class or better undergraduate degree from a university of recognized standing and will normally have:
 - a post-graduate aquaculture credential or an aquaculture focus in their undergraduate degree; or significant professional experience in the aquaculture industry; and
 - a minimum of two (2) years relevant employment experience.
3. In exceptional cases, applicants who have not completed an undergraduate degree, but who meet all other requirements, may be considered for admission. Preference will be given to those who have significant and relevant professional experience, and have successfully completed several years of post-secondary studies. Applicants who do not meet normal admission requirements shall be required to complete, with a high level of achievement, certain undergraduate courses before being considered for admission.
4. Applicants who did not complete a baccalaureate or post-graduate degree at a recognized university where English is the primary language of instruction must normally complete either the:
 - Test of English as a Foreign language (TOEFL) and achieve a paper-based score of 580 (or higher), computer-based score of 237 (or higher), or Internet based score of 92-93 (or higher); or
 - International English Language Testing System (IELTS) and achieve a score of 7 (or higher). Information regarding the TOEFL is available from the Educational Testing Service at www.ets.org. IELTS information is available at www.ielts.org. It is noted that other equivalent tests acceptable to the School of Graduate Studies will also be considered.
5. Upon acceptance into the program, students will be admitted to one of the two Options: the Engineering Technology and Applied Science Option or the Aquaculture Technology Option.

33.2.2 Program of Study

33.2.2.1 Master of Technology Management - Engineering Technology and Applied Science Option

1. Students in the Master of Technology Management (Engineering Technology and Applied Science Option) shall be required to complete a minimum of either:
 - a. 24 credit hours of course work and a major project and report (6 credit hours). Course work includes three compulsory core courses (9 credit hours) and five Category A Electives (15 credit hours). Students on the project route will complete TECH 6100: Project in Engineering Technology, Applied Science and Technology Management (6 credit hours). See **Courses**.
 - b. 30 credit hours on a comprehensive-course route. Course work includes three compulsory core courses (9 credit hours) and seven Category A Electives (21 credit hours). See **Courses**.
2. Up to three relevant elective courses (9 credit hours) may be transferred from other graduate programs within the School of Graduate Studies or from other post-secondary institutions recognized by Senate, subject to the approval of the Dean of Graduate Studies on the recommendation of the Academic Director.

3. Students with full-time status may register for a maximum of 9 credit hours in any regular semester and a maximum of 6 credit hours in intersession or summer session.

Students with part-time status may register for a maximum of 6 credit hours in any regular semester and a maximum of 3 credit hours in intersession or summer session.

Students may register for additional courses in a semester or session with the permission of the Academic Director of the Program.

33.2.2.2 Master of Technology Management - Aquaculture Technology Option

1. Students in the Master of Technology Management (Aquaculture Technology Option) shall be required to complete a minimum of either:
 - a. 24 credit hours of course work and a major project and report (6 credit hours). Course work includes three compulsory core courses (9 credit hours); and five elective courses (15 credit hours), of which at least 3 must be from Category B. Students on the project route will complete MSTM 6102: Project in Aquaculture Technology Management (6 credit hours). See **Courses**.
 - b. 30 credit hours on a comprehensive-course route. Course work includes three compulsory core courses (9 credit hours) and seven elective courses (21 credit hours), of which at least 3 must be from Category B. See **Courses**.
2. Up to three relevant elective courses (9 credit hours) may be transferred from other graduate programs within the School of Graduate Studies or from other post-secondary institutions recognized by Senate, subject to the approval of the Dean of Graduate Studies on the recommendation of the Academic Director.
3. Students with full-time status may register for a maximum of 9 credit hours in any regular semester and a maximum of 6 credit hours in intersession or summer session.

Students with part-time status may register for a maximum of 6 credit hours in any regular semester and a maximum of 3 credit hours in intersession or summer session.

Students may register for additional courses in a semester or session with the permission of the Academic Director of the Program.

33.2.3 Evaluation

1. Students for the Master of Technology Management Degree must obtain a grade of B or better in all program courses.
2. Students who receive a grade of less than B in any course will be permitted to remain in the program provided the course is repeated and passed with a grade of B or better. Alternatively, the student may, on the recommendation of the Academic Director, and with the approval of the Dean of Graduate Studies, substitute another graduate course. Only one course repetition or substitution will be permitted during the student's program after which the student shall be required to withdraw from the program.

33.2.4 Courses

Core Courses:

- MSTMTECH 6031 Overview of Technical Operations (CR the former MSTM 6031)
- MSTMTECH 6032 Managing Technological Innovation (CR the former MSTM 6032)
- MSTMTECH 6054 Technology Assessment (CR the former MSTM 6054)

Elective Courses

Category A Electives

- MSTMTECH 6022 Communication and Conflict Resolution in a Technical Environment (CR the former MSTM 6022)
- MSTMTECH 6023 Strategic Planning, Policy, Participation and Management in Technical Operations (CR the former

MSTM 6023)
 MSTMTECH 6030 Principles of Management for Engineering Technology Enterprises (CR the former MSTM 6030)
 MSTMTECH 6033 Quality Systems (CR the former MSTM 6033)
 MSTMTECH 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments (CR the former MSTM 6034)
 MSTMTECH 6035 Information Technology Applications in the Health and Engineering Technology Environments (CR the former MSTM 6035)
 MSTMTECH 6036 Supply Chain Management and Advanced Engineering Technology Operations (CR the former MSTM 6036)
 MSTMTECH 6037 Risk Analysis and Operations in the Engineering Technology Sector (CR the former MSTM 6037)
 MSTMTECH 6038 Manufacturing and Engineering Technology Management (CR the former MSTM 6038)
 MSTMTECH 6039 Sustainability and Environmental Responsibility (CR the former MSTM 6039)
 MSTMTECH 6052 Management of Intellectual Property (CR the former MSTM 6052)
 TECH 6053 Legal Implications of Technology Management (PR MSTM 6032)
 TECH 6055 Asset Integrity Management
~~MSTM 6054 Technology Assessment~~
 MSTM 6056 Management of International Development

Category B Electives

MSTM 6071 Management of Aquaculture Technology
 MSTM 6072 Animal Husbandry Management
 MSTM 6073 Aquaculture Environmental Management
 MSTM 6074 Aquaculture Site and Operational Assessment
 MSTM 6075 Aquaculture Engineering Technology Management

Project Courses

MSTMTECH 6100 Project in Engineering Technology, Applied Science and Technology Management (6 credit hours)

Students will choose a topic in consultation with the Academic Director and will work independently to carry out an in-depth study of a problem or application within the area of technology management and fully document and present their findings. Preferably the problem will be directly related to a workplace situation. (CR the former MSTM 6100)

MSTM 6102 Project in Aquaculture Technology Management (6 credit hours)

Students will choose a topic in consultation with the Academic Director or designate and will work independently to carry out an in-depth study of a problem or application within the area of aquaculture technology management and fully document and present their findings. Preferably the problem will be directly related to a workplace situation.

18 Regulations Governing the Degree of Master of Marine Studies and the Graduate Diploma in Marine Studies (Fisheries Resource Management)

18.2 Master of Marine Studies (Fisheries Resource Management) and 18.1 the Graduate Diploma in Marine Studies (Fisheries Resource Management)

18.2.4.3 Category B Electives

TECH 6022 Communication and Conflict Resolution in a Technical Environment (CR the former MSTM 6022)
 TECH 6023 Strategic Planning, Policy, Participation and Management in Technical Operations (CR the former MSTM 6023)
 TECH 6033 Quality Systems (CR the former MSTM 6033)
 TECH 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments (CR the former MSTM 6034)
 TECH 6039 Sustainability and Environmental Responsibility (CR the former MSTM 6039)
 MSTM 6044 Marine Environment Law and Pollution Control
 MSTM 6056 Management for International Development
 MSTM 6071 Management of Aquaculture Technology

Master of Marine Studies (Marine Spatial Planning and Management) (18.3)

18.3.2.1 Core Courses

All students must complete the following compulsory core courses:

- MSTM 6011 Introduction to Integrated Coastal and Ocean Management / Marine Spatial Planning
- MSTM 6012 Fundamentals of Geospatial Analysis
- MSTM 6013 Resource/Natural Environment and Ocean Use Characterization
- MSTM 6014 Geospatial Analysis for Marine Spatial Planning (prerequisites: MSTM 6011, 6012, and 6013)
- TECH 6022 Communication and Conflict Resolution in a Technical Environment (CR the former MSTM 6022)
- MSTM 6027 Coastal and Ocean Environmental Policies
- TECH 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments (CR the former MSTM 6034)

18.3.6.1 Core Courses

- MSTM 6011 Introduction to Integrated Coastal and Ocean Management / Marine Spatial Planning
- MSTM 6012 Fundamentals of Geospatial Analysis
- MSTM 6013 Resource/Natural Environment and Ocean Use Characterization
- MSTM 6014 Geospatial Analysis for Marine Spatial Planning (prerequisites: MSTM 6011, 6012, and 6013)
- TECH 6022 Communication and Conflict Resolution in a Technical Environment (CR the former MSTM 6022)
- MSTM 6027 Coastal and Ocean Environmental Policies
- TECH 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments (CR the former MSTM 6034)

19 Regulations Governing the Degree of Master of Maritime Management

19.2.2 (1.a. ii) Elective Courses

ii. Elective Courses (Six to be completed: a minimum of one from Category A and three from Category B):

Category A

- TECH 6022 Communication and Conflict Resolution in a Technical Environment (CR the former MSTM 6022)
- TECH 6023 Strategic Planning, Policy, Participation and Management in Technical Operations (CR the former MSTM 6023)
- TECH 6030 Principles of Management for Engineering Technology Enterprises (CR the former MSTM 6030)
- TECH 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments (CR the former MSTM 6034)
- TECH 6039 Sustainability and Environmental Responsibility (CR the former MSTM 6039)
- TECH 6052 Management of Intellectual Property (CR the former MSTM 6052)
- TECH 6054 Technology Assessment (CR the former MSTM 6054)

19.2.2 (1.b.ii) Elective Courses

ii. Elective Courses (Eight to be completed: a minimum of two from Category A and four from

Category B):

Category A

- TECH 6022 Communication and Conflict Resolution in a Technical Environment (CR the former MSTM 6022)
- TECH 6023 Strategic Planning, Policy, Participation and Management in Technical Operations (CR the former MSTM 6023)
- TECH 6030 Principles of Management for Engineering Technology Enterprises (CR the former MSTM 6030)
- TECH 6034 Project Management in the Offshore, Health, Fisheries and Engineering Technology Environments (CR the former MSTM 6034)
- TECH 6039 Sustainability and Environmental Responsibility (CR the former MSTM 6039)
- TECH 6052 Management of Intellectual Property (CR the former MSTM 6052)
- TECH 6054 Technology Assessment (CR the former MSTM 6054)

iii. School of Graduate Studies – Transcript Notations

The School of Graduate Studies is recommending endorsement by Academic Council that scholarships/bursaries awarded by the Associate Vice-President (Academic) and Dean of Graduate Studies be noted on students' academic records.

This item of business will be sent to Senate for endorsement.

iv. New Master's and PhD programs – Marine Institute

The Marine Institute submitted for consideration the proposed new Master of Science in Maritime Studies (Safety and Survival) and Doctor of Philosophy in Maritime Studies.

It was moved by P. Coady and seconded by D. Howse that the new programs be approved in principle which will permit SGS to conduct an external review. The motion

Discussion:

It was noted some Medicine international courses could be relevant for these programs. It was agreed that this information will be forwarded to Dr. Carnahan for the review.

CARRIED

7. ANY OTHER BUSINESS

- a. It was noted that the topic 'Pass with Distinction' will be discussed at the November meeting of Academic Council. This item was discussed at the previous Council meeting and members were asked to bring this topic to their Faculty/School Councils for discussion. Any comments can be sent to A. Williams, School of Graduate Studies.

8. NOTICE OF MOTION
9. ADJOURNMENT

The meeting adjourned at 4:21 p.m.

Aimée Surprenant, Chair

Echo Pittman, Secretary