

FISHERIES AND MARINE INSTITUTE

FISHERIES AND MARINE INSTITUTE

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An Industry-based Advisory Committee, established by an Act of Legislature, with members appointed by the Board of Regents of the University, advises the Fisheries and Marine Institute on fisheries and marine related programs and activities.

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 White, L., B.A. *Memorial*, M.L.S. *Dalhousie*; Associate University Librarian (Marine Institute, Educaiton and Music)

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Associate Registrar

Smith, N., B.Comm. *Memorial*

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Howell, J., B.B.A. *Memorial*

Admissions Officer

Brothen, J., B.A., M.Ed. *Memorial*

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 Flynn, M., B.B.A. *Memorial*
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 Trahey, T., B.A. *St. Thomas*

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Manager, Finance and Contracts

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Manager, Human Resources

Fowler, M., B.Comm. *Memorial*

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Manager, Marine Services

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Director, Development and Engagement

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 White, L., B.A. *Memorial*, M.L.S. *Dalhousie*; Associate University Librarian (Education, Marine Institute, and Music Resource Centre)

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Interim HeadBrett, P., B. Ed, M.Sc. *Memorial***Assistant Head**Carter, B., B.Sc. *Memorial***Co-ordinator of Programs**Singleton, J., B.Eng. *Memorial*; P. Eng. CD.**Director, Centre for Applied Ocean Technology**Gillespie, R., B.Sc. *McMaster*, M.Sc. *Memorial*, P.Geo.**Academic Personnel****Academic and Student Affairs**

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Morris, P., FM1

Nichols, J., B.Sc. *Memorial*, Adv.Dip. *Marine Institute*Onodanalore, C., B.Sc., M.Sc. *University of Benin*, B.Ed, M.Sc., Ph.D. *Memorial*Perry, J., B.Sc. (Nutrition), B.Ed.(Post-Secondary) *Memorial*, Adv. Dip. Food Safety *Marine Institute*Perry, R.A., B.A. (Ed.), B.A., M.A., M.B.A. *Memorial*Pippy, M.C., B.Sc., B.Ed., M.A.Sc. *Memorial*Pittman, R., M.C.P.M. *York*, O.N.2, F.M.1Pretty, R., B.Sc., B.Ed.(Post-Secondary) *Memorial*, Adv. Dip. Food Safety *Marine Institute*Rideout, K., B.Sc. *Memorial*, Graduate Diploma *Marine Institute*, M.M.S. *Memorial*Robertson, K., B.Sc., Adv.Dip., B.Ed., M.A.Sc. *Memorial*, Cert.Env. Man. *Toronto*Samson, L., Dip. Food Technology *Marine Institute*Strickland, J., Dip. Tech. *Marine Institute*, B.Sc., M.B.A. *Memorial*Trenholm, R., Dip. Ag. Eng. *NSAC*, B.Eng. *TUNS*, M.Sc. *Memorial*Westcott, J.D., B.Sc. *Memorial*, B.Sc. (Agriculture) *Dalhousie/**NSAC*, Ph.D. *UPEI*Whiteway, G., Dip.Tech. *College of Fisheries*, B.Sc., B.Voc.Ed.,M.Sc. *Memorial*

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Dutton, C. R., B.Eng., B.Voc.Ed., M.Eng. *Memorial*, (School Head)
 Anastasiadi, A., Dip.Eng. *Batumi Marine College USSR*, Marine Engineer (2nd Class)
 Antony, J., Master Marine (Canada), Master Marine Unlimited (United Kingdom), BTEC Higher National Diploma in Nautical Science (United Kingdom), Post Graduate Diploma in Logistics and Shipping- IIL (India)
 Azizan, H., Dip.Tech. *College of Fisheries*, B.Voc.Ed., M.Ed., M.M.S. *Memorial*, M.M.M. *Dalhousie*, M.Sc. *Plymouth*, Dip. Maritime Business Management *Lloyds Maritime Academy*, Master Mariner, Certified Port Executive
 Bae, C., B.Eng., M.Eng. *Inha University*
 Baker, K., Dip.Tech. *College of Fisheries*
 Barbour, K., Diploma in Mechanical Engineering Technology (Marine) *Marine Institute*, First Class Motor Marine Engineer Certificate
 Bishop, P. W., Dip.Tech. Marine Engineering *Marine Institute*, Interprovincial Red Seal Machinist, Cert. IV in Training and Assessment, TAFE, NFPA 472, NFPA 1001 Level II, NFPA 1002, NFPA 1021 Level 1, NFPA 1041 Level 1
 Brake, D. J., B.Sc., B.Ed., B.A., M.Ed. *Memorial*
 Brown, H., Journeyman Welder Certificate with Interprovincial Red Seal *College of Trades and Technology*
 Budgett, D. B.Sc., B.A., B.Ed., M.Ed. (Post -Secondary), M.Ed. *Memorial*
 Callahan, C., B.Sc., B.Ed. *Memorial*
 Clouter, E., B.A., B.Ed. *Memorial*, M.Ed. *Minnesota*
 Courage, A., B.Eng., B.Ed., M.A.Sc. *Memorial*
 Cross, J., Dip. Tech. *Georgian*, B.Sc. *Queens*, M.Eng. *Memorial*, P.Eng. O.N.II
 Curtis, S.L., Dip.Tech. *Marine Institute*, Dip. Voc.Ed., B.Tech., Master of Technology Management *Memorial*
 Dubuc, S., B.A. *Guelph*, Dip. N.Sci. *Marine Institute*, B.M.S. *Memorial*, Master Mariner
 Ennis, J., Dip. Tech. *College of Fisheries*, Master Mariner
 Fiander, G., Dip. Tech. *Marine Institute*, Master Mariner
 Francis, D., Marine Engineer (1st Class), Dip. Ed. (Post-Secondary), B.M.S., B.Ed. (Post-Secondary), M.M.M. *Memorial*, Dip. Marine Surveying *Lloyds Maritime Academy*
 Hanlon, C.R., Dip.Tech. Marine Engineering *Marine Institute*, Marine Engineer (2nd Class Motor) (on leave)
 Hargreaves, B., Fishing Master I, Master Mariner
 Harris, A., B.Sc., B.Ed., M.Ed. *Memorial*
 Hopkins, C., B.M.S. *Memorial*, Dip.Tech. (Nautical Science) *Marine Institute*, Master 500 GT, First Mate Intermediate Voyage, NFPA 1001 Fire Fighter 2, ISO-FDSOA Pro Board
 Hyder N., BTEC Higher National Diploma in Nautical Science *Blackpool & Fylde College, UK*, Master Mariner Unlimited *Maritime and Coastguard Agency, UK*
 Kavanagh, T., Dip.Tech. *Marine Institute*, Marine Engineer (3rd class motor, 4th class steam, 3rd class power)
 Kennedy, J., Master Mariner
 Lambert, F. W., Dip. Tech *Marine Institute*, Master Mariner, B.Ed. (Post-Secondary) *Memorial*
 March, E., Dip.N.Sci. *Marine Institute*, Master Mariner
 March, V.
 Marshall, M., B.Eng., M.Eng., Ph.D. *Memorial*, P.Eng.
 Martin, P., Master Mariner
 McCulloch, C., B.A. *St. Francis Xavier*, M.A., DPW *Memorial*
 Meadus, F., CD, Communications Specialist, Dip. Post Sec. Ed. *Memorial*, Cert. Occupational Health & Safety, Advanced Diploma in Safety Engineering *College of the North Atlantic*
 Mueller, U., Master Mariner
 Munden, D., Master Mariner (on leave)
 O'Brien, I., Dip. Tech. *Marine Institute*
 O'Keefe, T., Dip. Tech. *Marine Institute*, B.Tech., B.Ed. (Post-Secondary), M.Ed. *Memorial*, PE4th
 Parsons, J.R., Dip. Tech. *College of Fisheries*, Master Mariner, B.M.S., Cert. Business Administration, B.Ed., M.C.P.M. *Memorial*, M.Sc. *Maine Maritime*, FCIP., CRM. *University of Toronto/Insurance Institute of Canada*, Ph.D. *University of Plymouth*
 Peach, A., B.A., B.Ed. (Post-Secondary) *Memorial*, M.A. *Toronto*
 Pelley, J., B.Sc., B.Ed. *Memorial*
 Perry, J., Diploma in Mechanical Engineering Technology (Marine) *College of Fisheries*, First Class Motor Marine Engineer Certificate
 Pond, J., B.Eng., B.Ed. (Post-Secondary) *Memorial*
 Pynn, W., Dip. Tech. *Marine Institute*, MBA *University of Warwick*

Rouzbeh, R., Marine Engineering Certificate *Pakistan Marine Academy*, M.Sc. Maritime Technical Operations *Liverpool John Moores University, UK*, First Class Marine Engineer Certificate of Competency (Motor Ships-Unlimited Voyages)
 Ryan, J. C., B.P.E., B.Ed., B.Sc., B.A. *Memorial*
 Sheppard, S., Master Mariner
 Sidhu, H., Master Mariner (Unlimited) *Maritime and Coastguard Agency, UK*
 Stone, B., B.Eng., M.Eng., M.B.A. *Memorial*
 Strowbridge, K., Dip. Tech. (MESD), Dip. Tech. (NARC) *Marine Institute*, B.Tech. *Memorial*
 Tucker, J., B.Eng., M.Eng. *Memorial*, P.Eng.; Recipient of the President's Award for Distinguished Teaching, 2012
 Waddleton, K., Dip. Tech. Nautical Science *Marine Institute*, Master Mariner
 Wareham, M., Dip. Tech. (MESD), Dip. Tech. (NA) *Marine Institute*, B.Eng. *Memorial*
 White, A., Dip.Tech. *College of Fisheries*, B.Tech., B.M.S., B.Ed.(Post-Secondary) *Memorial*, Marine Engineer (1st Class Motor, 4th Class Steam)
 Williams, G., Dip. Tech. *College of Fisheries*, Master Mariner
 Woolridge, D., B.Sc., B.Ed., M.Ed. *Memorial*

School of Ocean Technology

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Barajas M, B.Sc., M.Sc., Ph.D. *Polytechnique Montreal*
 Batten, C., Dip. Electronics Tech *College of the North Atlantic*
 Bishop, G., Dip. Tech. *Marine Institute*, B.Tech., M.Env.Sci. *Memorial*
 Brett, P., B.Sc., B.Ed., M.Sc. *Memorial*
 Chaulk, C., B. Eng., B.Ed., M.Ed. *Memorial*
 Coronado, C., B.Sc., M.Sc., Ph.D. *Ecole Polytechnique de Montreal, LL.M. University of Turin, CSSBB*
 Elliott, P., B.Sc., B.Ed., Dip. Tech. Ed., M.Ed. *Memorial*
 Halfyard, P., Cert. Tech. *College of Fisheries*, Cert. Tech. *Marine Institute*
 Haynes, D., Dip. Tech. *College of Trades and Technology*, B.Eng. *Memorial*, P.Eng.
 Jewer, J., B.Comm.(Co-op)(Hons.) *Memorial*, M.A.Sc., Ph.D. *University of Waterloo*
 Keats, C., Dip. Tech. *Marine Institute*, B. Tech., M.Env.Sci. *Memorial*
 Leighton, S., B.Sc. Eng. *New Brunswick*, M.Sc. *Memorial*, P. Eng., CLS.
 Lewis, R., B.Sc.(Hons.) *Acadia*, M.Sc., M.Eng., Ph.D. *Memorial*, Ph.D. *Australian Maritime College - University of Tasmania*
 Matchem, J., B. Eng., B.Ed. *Memorial*
 Matchim, R., B.Eng. *Memorial*
 Piercey, V., B.Eng *Memorial*, P.Eng.
 Ragunathan, J., B.Eng. *Madurai Kamaraj University, India*, M.Eng. *Bharathidasan University, India*
 Roche, C., Diploma of Aircraft Maintenance Engineering
 Roche, R., B.Eng. *Memorial*
 Roy, A., Dip. Geodesy *CEGEP Limoilou*, M.Sc. *Memorial*
 Ryan, P., Dip Tech., B. Eng. *College Militaire Royale du Canada*, B.Ed., M.E.M. *Memorial*, P. Eng., CD
 Singleton, J., B.Eng. *Memorial*, P. Eng.
 Smith, W., Cert. Red Seal, Dip. Tech. *College of Fisheries*, B. Tech, Cert. Voc. Ed. *Memorial*, C.E.T.
 VanderVoort, R., B.Sc. *Windsor*
 Venkatraman, S., B.Eng. *Bharathidasan University, India*, M.Eng. *SASTRA University, India*, B.Ed. *Memorial*
 Way, B., B.Eng., M.B.A., M.Ed. *Memorial*, P.Eng.
 Wells, D., Dip. Tech., B. Eng., B.Ed., M.T.M., P.Eng. *Memorial*
 Wu, L., B.Eng. *Northwestern Polytech University*, B.Ed., M.Eng. *Memorial*

Division of Ocean Safety

Safety Emergency Response Training Centre (SERT)

Alexander, J., N.F.P.A. 1001 Level I & II, NFPA 1003, NFPA 1041 Level 1
 Doyle, T., NFPA 472, NFPA 1001 Level 1 & II, NFPA 1002, NFPA 1003, NFPA 1041 Level 1 & II
 Fewer, J., Restricted Watchkeeping Mate, FM III, Marine Diesel Mechanic, NFPA 472, NFPA 1001 Levels I & II
 Gallant, T., NFPA. 472, NFPA 1001 Level I-III, NFPA 1002, NFPA 1003, NFPA 1041 Level I & II
 Goulding-Harnum, S., B.Ed. *Memorial*, NFPA 472, NFPA 1001 Level I & II, NFPA 1041 Level I & II, NFPA 1021 Level I - IV
 O'Quinn, B., N.F.P.A 472, N.F.P.A 1001 Level I & II, N.F.P.A. 1002, N.F.P.A. 1003, N.F.P.A. 1041 Level 1

Piercey, H., NFPA 472, NFPA 1001 Level I & II, NFPA 1002, NFPA 1041 Level I & II, NFPA 1021 Level I-4
 Stapleton, G., NFPA 472, NFPA 1001 Level I-III, NFPA 1002, NFPA 1003, NFPA 1041 Level I-III

Offshore Safety and Survival Training Centre (OSSC)

Anstey, F.A., B.A., B.Voc.Ed., Cert.Bus.Adm., M.Ed. *Memorial*, Master Intermediate Voyage
 Barron, R., Dip. Tech. Nautical Science *Marine Institute*, Watchkeeping Mate
 Blackmore, D., B.Voc.Ed. *Memorial*, F.M.1
 Brazil, D., Dip.Tech. *Marine Institute*, Master Mariner
 Butler, K., B.Sc., B.A., B.Ed., Dip. Adult Ed., M.Ed. *Memorial*
 Clarke, C., Dip. Tech. *Marine Institute*, Master Intermediate Voyage
 Dohey, P., B.Ed. *Memorial*, M.Sc. *University of Lester*
 Donnelly, D., Master Mariner
 Drake, S., Master Mariner
 Dunphy, L., CD2, Cert.Adv. Instructor Methodology *St. Mary's*
 Dwyer, D., Diploma of Nautical Science, Master Intermediate

Voyage
 Harvey, G.
 Kearney, G., Dip. Tech. *Marine Institute*, Dynamic Positioning Certificate *Nautical Institute*, Master Mariner
 Lacour, D., B.Comm. *Memorial*, NFPA Level 2 Firefighting Cert. *University of Oklahoma*, Paramedic I
 Norris, M., Dip. Tech. Technical Marine Engineering *Marine Institute*, Third Class Marine Engineer
 Oliver, J., Dip. Post Sec. Ed. *Memorial*, Primary Care Paramedic, Emergency Medical Responder Instructor Trainer
 Shanahan, J., Dip.Voc.Ed. *Memorial*, Marine Engineer (4th Class), Millwright (Indust.Mech.) Interprovincial Cert.
 Small, G., B.Sc., B.Ed., *Memorial*, FM
 Turpin, D., Marine Engineer (2nd Class Steam), Power Engineer (4th Class)
 Webber, K., Heavy Oil Operations Technician Certificate, 4th Class Power Engineer, Gas Processing Operations *Lakeland College*, Certificate in Occupational Health and Safety *University of New Brunswick*

1 The Memorial University of Newfoundland Code

The attention of all members of the University community is drawn to the section of the University Calendar titled **The Memorial University of Newfoundland Code**, which articulates the University's commitment to maintaining the highest standards of academic integrity.

2 Student Code of Conduct

Memorial University of Newfoundland expects that students will conduct themselves in compliance with University Regulations and Policies, Departmental Policies, and Federal, Provincial and Municipal laws, as well as codes of ethics that govern students who are members of regulated professions. The *Student Code of Conduct* outlines the behaviors which the University considers to be non-academic misconduct offences, and the range of remedies and/or penalties which may be imposed. Academic misconduct is outlined in **UNIVERSITY REGULATIONS - Academic Misconduct** in the University Calendar.

For more information about the *Student Code of Conduct*, see www.mun.ca/student/sscm/conduct/

3 School Description

The Fisheries and Marine Institute was established in 1964 as the College of Fisheries, Navigation, Marine Engineering and Electronics. It became affiliated with the University in 1992 and since then has continued to grow as a world-class centre of marine technology and education. The official name is the Fisheries and Marine Institute of Memorial University of Newfoundland, but it is commonly known as the Marine Institute.

The main campus of the Marine Institute overlooks the city of St. John's from within Pippy Park, which has extensive hiking trails and recreational facilities. This building houses a flume tank, a seafood processing plant, freshwater aquaculture research and development facilities, and extensive marine simulation facilities. The Dr. C. R. Barrett Library, located at this campus, houses one of Canada's largest marine-related collections. In addition, the Institute manages the Offshore Safety and Survival Centre in Foxtrap, the Safety and Emergency Response Training (SERT) Centre in Stephenville, a regional fisheries and marine training center in Lewisporte, and a marine base on the south side of St. John's harbour and another in Holyrood.

The Marine Institute provides a full range of programs focussing on fisheries and marine science and technology. In addition to undergraduate and graduate degrees, the Institute offers advanced diplomas, diplomas of technology, and technical and vocational certificates. The Institute also runs a variety of short courses and industrial response programs.

All programs and courses are designed to provide students with the knowledge and skills required for success in the workforce. The Institute seeks the advice of industrial program advisory committees in the ongoing development and review of programs. Whenever appropriate, it submits programs for national accreditation, providing graduates with mobility in professional employment.

3.1 The Marine Institute Students' Union (MISU)

The Marine Institute Students' Union (MISU) was incorporated in 1991. It is committed to the provision of services to students as well as representing the student body at the national, provincial and institute levels in matters affecting the quality of student life.

The MISU is a prominent member of The Canadian Federation of Students (CFS). The CFS provides a voice for students at over 70 universities, colleges, and technical institutes across Canada including more than 32,000 students in Newfoundland and Labrador. The national body has a strong presence in Ottawa and ensures students' opinions are known on Parliament Hill. Services provided by CFS include the National Student Health Network, student saver cards, Student Work Abroad Program (SWAP), International Student Identity Cards (ISIC), and Travel Cuts. The CFS Newfoundland and Labrador (CFS-NL) ensures student's opinions are known in the Provincial House of Assembly. The MISU takes part in the CFS bi-annual conferences to discuss and form policies on behalf of students.

Within the Institute, the MISU has representation on a number of committees, including the Marine Institute Industry Advisory committee and the Academic Council, where the Union members ensure that student well-being is at the forefront in all policies affecting student life. The MISU administers the student health plan. Many social and recreational activities are planned and sponsored by the MISU including Winter Carnival held during the last week of January. Profits from the social activities are returned to the students in the form of scholarships. The MISU manages and maintains the student lounge -The Mariner's Lounge.

4 Description of Degree Programs

Students must meet all regulations of the Fisheries and Marine Institute in addition to those stated in the University's general regulations. For information concerning fees and charges, admission/readmission to the University, and general academic regulations (undergraduate), refer to **UNIVERSITY REGULATIONS**.

For information about non-degree programs and upgrading opportunities refer to www.mi.mun.ca.

4.1 General Degrees

The Marine Institute offers two undergraduate degrees. For specific details on each degree refer to the appropriate **Degree Program Regulations**. The courses in the program are available fully by distance and select courses are available on campus.

4.1.1 Bachelor of Maritime Studies

The Bachelor of Maritime Studies program prepares graduates for career advancement in the maritime and related industries. It is designed for students who have graduated from accredited, or Transport Canada approved, diploma of technology programs in the marine fields. The program is also available to professional mariners, professional fish harvesters and certain Canadian Forces (Naval Operations) personnel. Courses in the program provide the student with an introduction to human resource and business management concepts, and the social contexts in which their careers will be based. The program consists of 39 credit hours in addition to work completed in a diploma program and can be taken on a full-time or part-time basis.

4.1.2 Bachelor of Technology

The Bachelor of Technology program prepares graduates for career advancement in health science technology or engineering/applied science technology industries. It is designed for students who have graduated from an accredited diploma of technology program that is applicable to one of two optional areas. Courses in the program provide the student with an introduction to human resource and business management concepts, and the social contexts in which their careers will be based. The program consists of 39 credit hours in addition to work completed in a diploma program and can be taken on a full-time or part-time basis.

The optional areas are:

- Engineering and Applied Science Technology Option, which is normally chosen by students who have an engineering/applied science technology diploma.
- Health Sciences Technology Option, which is normally chosen by students who have a health sciences technology diploma.

5 Admission/Readmission Regulations for Degree Programs

In addition to meeting the admission/readmission requirements for the University students must also meet the admission/readmission requirements for the Marine Institute. See **UNIVERSITY REGULATIONS - Admission/Readmission to the University (Undergraduate)** for University requirements.

5.1 General Information

1. The application for admission or readmission is submitted online; current and returning Fisheries and Marine Institute of Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Fisheries and Marine Institute of Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply.

Table 1 Application Deadlines

Fall	June 15 (Official transcripts due June 30)
Winter	October 15 (Official transcripts due October 30)
Spring	March 15 (Official transcripts due March 30)

2. Students may not obtain both a Bachelor of Maritime Studies and a Bachelor of Technology degree based upon completion of the same diploma of technology.

5.2 Admission Requirements for Applicants to the Bachelor of Maritime Studies Program

1. The application for admission or readmission is submitted online; current and returning Fisheries and Marine Institute of Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Fisheries and Marine Institute of Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply. This application must include all required documentation including proof of the diploma or certificate required for admission in a specific category.
2. **Categories for admission to the Bachelor of Maritime Studies**
Applicants must meet the general admission/readmission requirements of the University and be eligible for admission to the Bachelor of Maritime Studies program in one of the following categories:
 - Category A: applicants holding a diploma from the Marine Institute in nautical science, marine engineering technology, naval architecture technology or marine engineering systems design technology,
 - Category B: applicants holding a Canadian Technology Accreditation Board accredited, or Transport Canada approved, diploma in marine engineering technology or nautical science,
 - Category C: applicants holding a Canadian or non-Canadian diploma similar to an accredited or Transport Canada approved Marine Institute diploma in nautical science, marine engineering technology, naval architecture technology or marine engineering systems design technology,
 - Category D: applicants holding a Transport Canada Certificate of Competency at the Master Mariner, Fishing Master First Class or Engineering First Class level or equivalent,
 - Category E: applicants who have Canadian Forces (Naval Operations) training acceptable to the Admissions Committee.
3. Applications to the program will be considered by the appropriate admissions committee(s).
4. In accordance with the **UNIVERSITY REGULATIONS - Residence Requirements - Second Degree**, students completing the Bachelor of Maritime Studies Program, as a second degree, must complete all required courses within the Bachelor of Maritime Studies Program.

5.3 Admission Requirements for Applicants to the Bachelor of Technology Program

- The application for admission or readmission is submitted online; current and returning Fisheries and Marine Institute of Memorial University of Newfoundland applicants should apply using the Admissions menu within Memorial Self-Service at www5.mun.ca/admit/twbkwbis.P_WWWLogin. Applicants who are new to Fisheries and Marine Institute of Memorial University of Newfoundland should follow the application instructions at www.mun.ca/undergrad/apply. This application must include all required documentation including proof of the diploma or certificate required for admission in a specific category.
- Categories for admission to the Bachelor of Technology Program**
Applicants must meet the regular admission requirements of the University and be eligible for admission in one of the following categories:
 - Category A: applicants holding a diploma from the Marine Institute in marine engineering technology, naval architecture technology or marine engineering systems design technology, marine environmental technology,
 - Category B: applicants holding a diploma of technology accredited by the Canadian Medical Association (CMA),
 - Category C: applicants holding a diploma of technology in engineering/applied science technology accredited by the Canadian Technology Accreditation Board (CTAB), or Technology Accreditation Canada (TAC),
 - Category D: applicants holding a diploma of technology comparable to a Marine Institute or College of the North Atlantic three-year CTAB accredited diploma in engineering/applied science technology,
 - Category E: applicants holding a diploma of technology comparable to a College of the North Atlantic three-year CMA accredited diploma,
 - Category F: applicants holding a Certified Engineering Technologist (CET) designation or a Professional Technologist (PTech) designation along with a diploma of technology acceptable to the Admissions Committee,
 - Category G: applicants who have Canadian Forces training acceptable to the Admissions Committee.
- Upon acceptance into the program, students will be admitted to one of the two options: the Engineering and Applied Science Technology Option or the Health Sciences Technology Option. Students may be permitted to change their option with the approval of the Marine Institute Committee on Undergraduate Studies.
- Applications to the program will be considered by the appropriate admissions committee(s).
- In accordance with the **UNIVERSITY REGULATIONS - Residence Requirements - Second Degree**, students completing the Bachelor of Technology program, as a second degree, must complete all required courses in their stream of study within the Bachelor of Technology program.

6 Degree Program Regulations

6.1 Bachelor of Maritime Studies

- Students must complete 39 credit hours in addition to the work which was required under their category of admission.
- The required and elective courses are listed in **Table 2 Bachelor of Maritime Studies - Course Requirements For All Students**. These courses may have prerequisites which have to be met.
- When transfer credit has been granted for a course(s) taken to satisfy the requirements for admission students must take an additional elective University course(s).
- To meet the academic requirements for a Bachelor of Maritime Studies a candidate shall successfully complete the following program with a minimum overall average of 60% and a minimum numeric grade of 50% in each course required for the degree unless stated otherwise within the course description.
- Students must take 39 credit hours with 21 credit hours from the required courses and 18 credit hours from the electives.
- At least three electives must be chosen from Group A and at least one elective must be chosen from Group B.

Table 2 Bachelor of Maritime Studies - Course Requirements for All Students

Required Courses	Group A Electives	Group B Electives
3 credit hours in English at the 1000 level MSTM 4001 MSTM 4002 MSTM 4103 MSTM 4105 MSTM 4106 MSTM 4025 or Statistics 1510 or 2500	MSTM 4005 MSTM 4006 MSTM 4007 MSTM 4008 MSTM 4101 MSTM 4102 MSTM 4104	Business 1101 or 2102 Business 4000 Economics 1010 or the former 2010 Economics 1020 or the former 2020 Geography 3510 MSTM 4004 MSTM 4019 MSTM 4020 MSTM 4030 MSTM 4040 MSTM 4050 Philosophy 2571 Sociology 2120

6.2 Bachelor of Technology

- Students must complete 39 credit hours in addition to the work which was required under their category of admission.
- The required and elective courses are listed in **Table 3 Bachelor of Technology - Engineering and Applied Science Technology Option** and **Table 4 Bachelor of Technology - Health Science Technology Option**. These courses may have prerequisites which have to be met.
- When transfer credit has been granted for a course(s) taken to satisfy the requirements for admission, students must take an additional elective University course(s).
- To meet the academic requirements for a Bachelor of Technology a candidate shall successfully complete the program with a minimum overall average of 60% and a minimum numeric grade of 50% in each course required for the degree unless stated otherwise within the course description.

6.2.1 Bachelor of Technology - Engineering and Applied Science Technology Option

- Students must take 39 credit hours with 24 credit hours from the required courses and 15 credit hours from the electives.
- At least one elective must be chosen from each of the groups A and B.

Table 3 Bachelor of Technology - Engineering and Applied Science Technology Option

Required Courses	Group A Electives	Group B Electives
3 credit hours in English at the 1000 level MSTM 4010 MSTM 4019 MSTM 4020 MSTM 4025 or Statistics 1510 or 2500 or equivalent MSTM 4040 MSTM 4060 MSTM 4400	Business 1101 or 2102 Business 4000 Economics 3360 MSTM 4008 MSTM 4011 MSTM 4012 MSTM 4013 MSTM 4017 MSTM 4050 MSTM 4070 MSTM 4090 or Business 1000	Economics 1010 or the former 2010 Economics 1020 or the former 2020 Economics 3080 MSTM 4014 MSTM 4015 MSTM 4016 MSTM 4030 or Sociology 2120 Philosophy 1100 Philosophy 2571

6.2.2 Bachelor of Technology - Health Science Technology Option

- Students must take 39 credit hours with 18 credit hours from the required courses and 21 credit hours from the electives.
- At least one elective must be chosen from each of the groups A, B, and C.

Table 4 Bachelor of Technology - Health Science Technology Option

Required Courses	Group A Electives	Group B Electives	Group C Electives
3 credit hours in English at the 1000 level MSTM 4019 MSTM 4025 or Statistics 1510 or 2500 or equivalent MSTM 4040 MSTM 4060 MSTM 4400	Business 1101 or 2102 Business 4000 Economics 3360 MSTM 4008 MSTM 4011 MSTM 4012 MSTM 4013 MSTM 4017 MSTM 4050 MSTM 4090 or Business 1000	Economics 1010 or the former 2010 Economics 1020 or the former 2020 Economics 3080 MSTM 4014 MSTM 4015 MSTM 4016 MSTM 4030 or Sociology 2120 Philosophy 1100 Philosophy 2551 or 2552 or 2553 Philosophy 2571	Biology 2040 or 2041 Psychology 2010 Psychology 2020 Psychology 2030 Psychology 2800

7 Waiver of Degree Program Regulations

Students requesting waiver of University academic regulations should refer to **UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Waiver of Regulations**. Every student also has the right to request waiver of degree program regulations.

7.1 General Information

- The Marine Institute reserves the right in special circumstances to modify, alter, or waive any Marine Institute regulation in its application to individual students where merit and equity so warrant, in the judgement of the Committee on Undergraduate Studies of the Marine Institute.
- Students requesting a waiver of a Marine Institute regulation must submit their request in writing to the head of the program who will forward a recommendation to the Chair of the Committee on Undergraduate Studies of the Marine Institute. Medical and/or other documentation to substantiate the request must be provided.
- Any waiver granted does not reduce the total number of credit hours required for the degree.

8 Graduation

Upon meeting the qualifications for any of the degree programs of the Fisheries and Marine Institute a student must apply by the appropriate deadline date to graduate on the prescribed "Application for Graduation" form. This form may be obtained on-line at the Memorial Self Service at www.mun.ca/regoff/stuweb.htm. Additional information is available from the Office of the Registrar at www.mun.ca/regoff/graduation/apply_grad.php.

9 Appeal of Decisions

Any student whose request for waiver of Marine Institute regulations has been denied has the right to appeal. For further information refer to **UNIVERSITY REGULATIONS - General Academic Regulations (Undergraduate) - Appeal of Decisions**.

10 Course Descriptions

All courses of the Marine Institute degree programs are designated as MSTM (Maritime Studies/Technology Management).

4001 The Organization and Issues of Shipping - inactive course.

4002 The Business of Shipping will provide students with an understanding of financial statements, costs, revenues and financial performance of shipping companies as well as computing, voyage and annual cashflows. The course will develop an understanding of marine insurance and forecasting, and risk management.
PR: MSTM 4001

4004 Marine Environmental Management will introduce students to the requirements for the safe management of the marine environment. The course will introduce major environmental problems and identify the major threats to the marine environment. It will provide a working knowledge of these threats and consider the possible counter measures that may be employed by employees in the marine industry.

4005 Trends and Issues in International Shipping will provide students with an understanding of how regulatory bodies and their legislation have evolved to affect the modern seafarer trading internationally. This course will develop an understanding of the various rules and regulations dealing with Classification, ISM, MAPROL, SOLAS and SIRE inspections which have to be dealt with on a daily basis at sea.

4006 Maritime Human Resource Management provides basic principles of HRM in terms of seagoing and shore-based personnel. Students will analyze the world maritime labour market, HRM practices, outsourcing and international conventions. It stresses the importance of coherent maritime HRM systems required to gain a sustainable competitive advantage.

4007 Shipping Finance focuses on commercial ship management and the critical evaluation of alternative financial decisions. Analyzes the principles of financial ship management and the impact of global economic variables on the financial operations and performance of shipping companies. The course provides an appreciation of critical questions, problems, issues and alternative approaches incorporated in shipping finance. This will support and facilitate the conduct of meaningful financial analysis and managerial decision-making for investments and fund raising in shipping business.

4008 Introduction to Offshore Oil and Gas will provide students with an understanding of the basic concepts of the oil and gas industry from a marine perspective. This course will cover the entire supply chain and industry structure from upstream to downstream. Topics discussed will give an overview of oil and gas; how it is explored and evaluated, extracted, refined, transported and traded.

4010 Assessment and Implementation of Technology (formerly Technology 4010) examines the effects of technology on the physical, socio-economic, historic, cultural and aesthetic environments. The course also addresses relevant legislation, the generation and evaluation of project/product alternatives, and the prediction, verification and mitigation of technological effects.
CR: the former Technology 4010

4011 Introduction to Intellectual Property and its Management is an introductory course to the management of Intellectual Property Rights (IPRs). This course will cover the philosophical rationale for intellectual property rights, its technical and legal considerations, its implications to the development of science and technology and its economic impact in society.

4012 Occupational Health and Safety Legislation and Management is an introduction to occupational health and safety issues in a technical/industrial context. Students will gain a knowledge and understanding of the legislative framework surrounding occupational health and safety, the assignment of responsibilities in the workplace, the management of occupational health and safety in the workplace and the importance of establishing a positive safety culture.

4013 Structure and Functions of Technology-based Organizations focuses on the emergence of technology-based companies and how to implement methods to increase their organizational effectiveness. This course will concentrate on the integration of three basic frameworks which include the study of technological economics and organizational progression, structural configurations and operations, and universal and contemporary approaches to organizational design. In addition it will examine the challenges of change that face highly dynamic industries: individual and organizational change, technological change, and national and global change.

4014 Technology and the Environment will help students critically

examine technology and the environment and how the two are linked. Topics may include how technology is both the cause of and solution to many environmental problems, the greenhouse effect, renewable energy vs. fossil fuels, recycling vs. landfills, the efficiency paradox, geo-engineering, and other select current topics.

4015 Technological Entrepreneurship surveys technological entrepreneurship via examples of both successful and failed businesses in technological fields. By examining cases of entrepreneurship, this course will examine challenges and opportunities facing technological entrepreneurs.

4016 Technological Problem Solving will introduce students to TRIZ, a powerful set of tools and algorithms developed specifically for analyzing and solving technological problems. TRIZ was developed by people with a technical background for those with a technical background. While TRIZ was developed for inventing and solving technical problems, the tools and approaches can be used to understand and solve virtually any solvable problem.

4017 Technical Operations Management introduces students to the area of operations management as it pertains to technology companies. Operations is generally considered the process by which an organization converts inputs such as labour and material into outputs such as goods or services. This course will examine how to manage the processes with a particular emphasis on operations in technology-based companies. Topics may include operations based strategy, processes and technology, capacity and facilities planning, and supply chain management.

4019 Research Methods will examine the fundamental steps in the process of doing research. It will provide students with the necessary information and tools to conduct technical research and communicate their findings. This course will examine how to define a research project, how to prepare a research proposal, how to select a research methodology, how to collect and analyze data and information, and how to prepare a research project report.

4025 Applied Statistics will enable the student to use descriptive statistics to report data findings, to make statistical inferences using appropriate data analysis, and to use, and interpret the output from, statistical software.

4020 Economic Management for Technologists (formerly Technology 4020) provides an introduction to the economics of technological projects. Students will study the mathematics of money, cost composition, and project evaluation, including cost comparison. They will also learn to analyse projects for decision making, including risk assessment and replacement analysis. In addition, they will learn to use suitable criteria for project selection, and to conduct sensitivity analysis.
CR: Engineering 4102; the former Technology 4020

4030 Technology in the Human Context (formerly Technology 4030) examines technology in the historical context and technology in the modern era. Students will discuss human insights, innovation, the interactions between development and technology transfer, ethics and professionalism and how to develop a technology value system.
CR: the former Technology 4030

4040 Project Management for Technologists (formerly Technology 4040) will introduce the student to the interdisciplinary field of project management. The course covers the interpersonal skills necessary to successfully lead or work effectively within a project team as well as providing an overview of certain planning and scheduling tools and techniques necessary for the planning and monitoring of projects.
CR: the former Technology 4040

4050 Introduction to Quality Management (formerly Technology 4050) will provide students with an understanding of the philosophy and concepts involved in the total quality approach to quality management. The course covers the various tools and techniques used in quality management as well as providing an overview of the role of management.
CR: the former Technology 4050

4060 Advanced Technical Communications will enhance the technical communication skills of students. The course content examines technical writing fundamentals; information gathering, analysis, and documentation; proposal preparation; technical document applications; technical report preparation; graphics preparation; and technical presentations. The course will provide students with the knowledge and skills necessary to develop proposals, reports, and presentations for technical projects.

4070 Special Topics in Technology will provide the opportunity for students to maintain technical currency through a review of recent advances in technology and their application to particular technical areas.

4090 Introduction to Technology will provide a broad survey of practices

critical to operating a technology-based business. Topics covered may include an introduction to technology management, historical developments in the management of technology, the functions of technology management, and select current topics that are relevant to operating technology-based businesses.

410A and 410B Technical Project Report (same as the former MSTM 4100 and 4200) is a two-semester linked course based on independent study of a problem involving the management of technology. The subject of study will be decided in consultation with the course instructor and must be approved by a committee. The student will identify a research topic in a specialty area, write a concept paper, develop a proposal and write a report. The passing grade for this course is 65%.

CR: MSTM 4400, the former MSTM 4000, the former MSTM 4100, the former MSTM 4200, the former Technology 4000
 OR: must be completed within three consecutive semesters
 PR: MSTM 4060
 UL: not available to students following the 2017/18 Calendar or later as this course will be discontinued after Spring 2018

4101 Maritime Occupational Safety and Health (Legislation and Regulations) will provide students with the knowledge and understanding to manage the legislative framework within the workplace and show the importance of establishing a positive safety culture with specific focus on the maritime industry.

4102 Maritime Risk Management/Accident Incident Investigation will provide students with the knowledge of methodologies and practices needed to manage operational risk in today's maritime industry. Risk management will be analyzed in the context of prevention and mitigation of loss resulting from health and safety, equipment, and environmental accidents and incidents. The course will further explore methodologies and practices used to investigate accident and incident occurrences in the maritime industry.

4103 Advanced Communications for the Maritime Sector will equip students to write a variety of formal and informal maritime-related technical documents; develop students' capabilities in gathering and critically

analysing information from technical sources and constructing a clear message; and prepare students to develop and deliver oral technical presentations.

4104 Integrated Management Systems in Maritime Industries offers a firsthand knowledge of a systematic, comprehensive process for managing safety risks. A safety management system program provides for goal setting, planning, and measuring performance. It becomes part of the company's safety culture, as well as the way people do their jobs.

4105 Policy and Governance in the Maritime Industry provides the student with an understanding of the maritime industry as a global enterprise in the context of policy and governance. It will focus on the full range of the regulatory framework from the standpoint of the International Maritime Organization to the statutory regulations applicable to the Canadian maritime industry.

4106 Operations Management provides comprehensive knowledge of global ship management practices supporting the function of ship operations management, both ashore and at sea. This course aims to develop the students understanding of management issues in marine transportation as they relate to basic principles of management; management in multi-ethnic environments; managing under adverse conditions; the SOLAS Convention and the ISM and ISPS Codes; the International Labour Organization and the MLC Convention; the International Transport Federation; and, Port State Control.

4400 Technological Assessment Project will provide students with the opportunity to conduct an assessment and implementation plan of a technical project in their area of interest. Students will utilize the knowledge that they have obtained in the required courses and incorporate this knowledge into a final project paper.

CR: MSTM 410A/B, the former MSTM 4000, the former MSTM 4100, the former MSTM 4200, and the former Technology 4000
 PR: MSTM 4019, 4040, 4060, and 4025 or Statistics 1510 or 2500 or equivalent

