# **GRADUATE HANDBOOK**

# **2018-2019 ACADEMIC YEAR**

MECHANICAL ENGINEERING DEPARTMENT 76 LOMB MEMORIAL DRIVE KATE GLEASON COLLEGE OF ENGINEERING ROCHESTER INSTITUTE OF TECHNOLOGY ROCHESTER NY 14623-5604 VOICE (585) 475-5181 UPDATED 8/2/2018

## TABLE OF CONTENTS

Table of Contents	2
Foreword	3
Department Profile	3
Mechanical Engineering Graduate Program	4
General Program Requirements	5
Master of Engineering in Mechanical Engineering	6
Master of Science in Mechanical Engineering	7
Graduate Cooperative Education	9
Graduate Program Policies	10
Graduate Student Financial Support	11
Important Mechanical Engineering Contacts	12
Appendix A: Example Plans	13
Appendix B.1: Project with Paper	14
Appendix B.2: Graduate Internship	15
Appendix B.3: Graduate Independent Study	

#### **FOREWORD**

Welcome to RIT! We are confident you will find our mechanical engineering graduate educational programs are innovative, distinct, and nationally recognized for their excellence by both industry and academia. Our unique program is based on RIT's core belief in offering world-class hands-on engineering education, which allows students to customize their degree to their individual preferences and areas of study within Mechanical Engineering. The intent of this document is to summarize the degree programs and requirements. Our faculty and staff strive to provide the very best education to our students at all levels so please feel free to visit us in the Mechanical Engineering Office during normal business hours, Monday to Friday, 8:30am - 4:30pm, or by appointment. Again, welcome to RIT and enjoy your educational journey!

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#### **DEPARTMENT PROFILE**

The Kate Gleason College of Engineering (KGCOE), one of the nine RIT colleges, is the nation's premier career-oriented college of engineering. The KGCOE student body consists of almost 3,000 undergraduate and over 600 graduate students. RIT's cooperative education program is the 4th oldest and 5th largest in the world, with over 2000 co-op placements for engineering students at 500 different companies each year. KGCOE faculty are active in many research areas falling under five broad focus areas: Transportation, Energy, Communications, Healthcare, and Nanoscience and Microsystems Engineering. Research takes place across engineering disciplines and often involves other colleges at RIT, local health care institutions, and major industry partners. <a href="https://www.rit.edu/kgcoe">www.rit.edu/kgcoe</a>

The Mechanical Engineering (ME) Department is the largest academic department in the Kate Gleason College of Engineering, with a headcount of over 900 students in first year through graduate programs. ME offers Bachelor of Science degrees in Mechanical Engineering, and undergraduate options in Automotive Engineering, Aerospace Engineering, Energy and the Environment, and Bioengineering. At the graduate level, ME offers Engineering and Microsystems PhD degrees, Master of Science and Master of Engineering degrees, and an Advanced Certificate in Vibrations Engineering. The ME Department consists of several award-winning faculty members as well as cutting-edge facilities to conduct leading research in aerodynamics, medical devices, energy systems, system control, robotics, new product development, materials development, structural integrity, manufacturing, automotive systems, and space vehicle systems. <a href="https://www.rit.edu/kgcoe/mechanical">www.rit.edu/kgcoe/mechanical</a>

#### **MECHANICAL ENGINEERING GRADUATE PROGRAM**

The Department of Mechanical Engineering at the Rochester Institute of Technology offers world-class hands-on engineering education through two Master's degree options (Figure 1): a project-based Master of Engineering (ME) option and a thesis-based Master of Science (MS) option. Both options are 30-semester-credit-hour programs with specific degree requirements.

<u>Master of Engineering (ME)</u> - The Master of Engineering in Mechanical Engineering is a 30-semester-credit-hour professional degree program. This degree is particularly well-suited for students who do not wish to do a research-oriented thesis, those interested in updating their technical skills, and those students who wish to study part-time. A conventional thesis is not required for the Master of Engineering degree program and is replaced by a choice of capstone experiences. Courses taken within the Master of Engineering program are transferable to the Master of Science program in Mechanical Engineering. Students may complete the program degree requirements within one calendar year with summer study. Students may also augment their education through optional graduate co-op employment opportunities while completing their studies at RIT.

<u>Master of Science (MS)</u> - The Master of Science in Mechanical Engineering is a 30-semester-credit-hour thesis degree program. This degree is particularly well-suited for students interested in research and those considering a PhD. Students work closely with a faculty advisor to develop, conduct and disseminate their thesis. Students complete required and complementary coursework as they conduct research toward the completion of their thesis. With approval, students may also augment their education through optional graduate co-op employment opportunities with our vast number of industry partners while completing their studies at RIT.

	Master of Engineering (ME)	Master of Science (MS)
	Non-thesis degree option	Thesis degree option
Program	30 Credits Total 6 math 9 focus area 12 electives 3 capstone 0 graduate seminar	30 Credits Total 6 math 9 focus area 9 electives 6 thesis 0 graduate seminar
Purpose	Industry / Professional	Advanced degree

Figure 1: Comparison of the ME and MS programs

#### **GENERAL PROGRAM REQUIREMENTS**

Graduate students must fulfill degree requirements in *Math*, *Focus Area*, *Electives*, *Seminar*, and *Capstone* (ME) or *Thesis* (MS), for a total of 30 credits. Information presented in this document is superseded by information presented in the Graduate Bulletin, which contains all official requirements for degree completion. In the event of a disagreement between this summary and the Graduate Bulletin (published on the RIT website), the Graduate Bulletin takes precedence.

**MATH** Complete the two courses below (6 credits):

- MECE-707 Engineering Analysis
- MECE-709 Advanced Engineering Mathematics

**FOCUS AREA** Choose courses from one below or create a custom one (9 credits, Figure 2).

**ELECTIVES** Choose 600+ level degree-related courses (ME, 12 credits | MS, 9 credits).

**SEMINAR** Successfully complete three (3) terms of MECE-795 Graduate Seminar (0 credits).

Part-time students or students on co-op/internship are not required to attend.

Controls

CAPSTONE / THESIS

**Automotive Systems** 

Successfully complete a Capstone (ME, 3 credits) or Thesis (MS, 6 credits).

Automotive Systems	Mechanics-Design/Materials	Controls
MECE-623 Powertrain Systems and Design	MECE-605 Finite Elements	MECE-606 Systems Modeling
MECE-624 Vehicle Dynamics	MECE-620 Introduction to Optimal Design	MECE-643 Classical Controls
MECE-643 Classical Controls	MECE-623 Powertrain Systems and Design	MECE-743 Digital Controls
MECE-658 Introduction to Engineering Vibrations	MECE-644 Introduction to Composite Materials	MECE-744 Nonlinear Controls
MECE-739 Altern. Fuels and Energy Efficiency	MECE-657 Applied Biomaterials	EEEE-661 Modern Control Theory
MECE-752 Tribology Fundamentals	MECE-752 Tribology Fundamentals	EEEE-733 Robust Control
ISEE-740 Design for Manufacture and Assembly	MECE-785 Mechanics of Solids	EEEE-765 Optimal Control
Sustainability	Vibrations engineering	Manufacturing
MECE-629 Renewable Energy Systems MECE-733 Sustainable Energy Management	MECE-606 Systems Modeling	MECE-643 Classical Controls ISEE-626 Contemporary Production Systems
MECE-733 Sustainable Energy Management MECE-739 Altern. Fuels and Energy Efficiency	MECE-658 Introduction to Engineering Vibrations MECE-758 Intermediate Engineering Vibrations	ISEE-720 Production Control
ISEE-785 Fund. of Sustainable Engineering	EEEE-602 Random Signals and Noise	ISEE-740 Design for Manufacture and Assembly
ISEE-786 Lifecycle Assessment	EEEE-678 Digital Signal Processing	ISEE-741 3D Printing
ISEE-787 Design for the Environment	EEEE 070 Digital Digital 1 100000ing	ISEE-745 Manufacturing Systems
Thermo/Fluids engineering	Business	Product development
MECE-731 Computational Fluid Dynamics	ACCT-603 Accounting for Decision Makers	ISEE-741 3D Printing
MECE-738 Ideal Flows	ACCT-706 Cost Management	ISEE-750 Systems and Project Management
MECE-751 Convective Phenomena	INTB-730 Cross-Cultural Management	ISEE-751 Decision and Risk Benefit Analysis
MCSE-610 Applied Biofluid Mechanics	MGMT-735 Mgmt. Innov. Products and Services	ISEE-771 Engineering Systems I
	MGMT-740 Org. Behavior and Leadership	ISEE-772 Engineering Systems II

Mechanics-Design/Materials

\*not all courses are offered every semester; addition courses related to focus areas are available

Figure 2: Focus Areas & Related Courses

<u>Transfer Credits:</u> A maximum of 6 credit hours from U.S institutional graduate programs may be accepted as transfer credits upon review and approval by the Graduate Director. Only credits from courses relevant to the program will be considered.

<u>Credits Outside the Department:</u> A minimum of 21 credit hours of graduate-level course work must be taken in the Department of Mechanical Engineering to meet degree requirements; A maximum of 9 credit hours of focus area and/or elective courses can be taken outside the Department of Mechanical Engineering.

#### MASTER OF ENGINEERING IN MECHANICAL ENGINEERING

The Master of Engineering degree program consists of five elements of study: (1) two required math courses (6 credits), (2) three focus area courses (9 credits), (3) four graduate electives (12 credits), (4) three seminar courses (0 credits), and (5) one capstone requirement (3 credits). A minimum of 30 semester-credit hours are required for the ME Degree and at least 21 credit hours of graduate-level course work must be taken in the Department of Mechanical Engineering. Example program plans and timelines are provided in Appendix A.

#### CAPSTONE REQUIREMENT

All graduate students in the ME Program are required to complete one of the following capstone requirements:

- MECE-730 Design Project Leadership (reserved only for B.S./M.Eng. Students)
- MECE-792 Project with Paper (option for all M.Eng. and B.S./M.Eng. Students)
- MECE-777 Graduate Internship (option for all M.Eng. and B.S./M.Eng. Students)

**Design Project Leadership:** The student must demonstrate an acquired competence to lead a design project, including the development of a project scope, timeline and budget. Students completing the BS and ME degrees concurrently are expected to enroll in Design Project Leadership and take a leadership role on their senior design team. A final grade will be issued by the instructor.

Project with Paper (Requires Department Approval): The student must demonstrate an acquired competence in an appropriate topic within mechanical engineering. The topic is chosen in conference with a faculty advisor. The work may involve an independent research and/or a design project and/or literature search with a demonstration of acquired skill. To elect this option, complete the Project with Paper Proposal Form (Appendix B.1) and return the signed copy along with a separate, 1-page description of the project to the graduate program staff in the Mechanical Engineering Department. Upon Department approval, the Department will register the student for the 3-credit course for the specified term. Final project evaluations are required by the student and faculty advisor. A final grade will be issued by the Department based on these evaluations. Department approval is required prior to beginning the project and credit cannot be earned for work previously completed (e.g., from a previous class or independent study).

Graduate Internship (Requires Department Approval): The student must demonstrate an acquired competence in an engineering work experience. The project and associated tasks are to be identified in conference with the industry supervisor. The project/tasks should culminate a student's academic career (e.g., for full-time students with no work experience) or require a significant increase in a student's level of professional responsibility over current assignment roles (e.g., for part-time students working in industry). To be eligible for this option, the student must have earned at least 18 degree credits and maintain at least a 3.0 or higher graduate CGPA. To elect this option, complete the Graduate Internship Proposal Form (Appendix B.2) and return the signed copy along with a separate, 1-page description of the internship to the graduate program staff in the Mechanical Engineering Department. Upon Department approval, the Department will register the student for the 3-credit course for the specified term. Final project evaluations are required by the student and faculty advisor. A final grade will be issued by the Department based on these evaluations. Department approval is required prior to beginning the internship and credit cannot be earned for work previously completed (e.g., from a previous co-op experience).

#### MASTER OF SCIENCE IN MECHANICAL ENGINEERING

The Master of Science degree program consists of five elements of study: (1) two required math courses (6 credits), (2) three focus area courses (9 credits), (3) three graduate electives (9 credits), (4) three seminar courses (0 credits), and (5) a thesis (6 credits). A minimum of 30 semester-credit hours are required for the MS Degree and at least 21 credit hours of graduate-level course work must be taken in the Department of Mechanical Engineering. Example program plans and timelines are provided in Appendix A.

Students enrolled in the ME Program may apply to change to the MS degree program by: (a) demonstrating excellence in at least 12 or more credits of ME Program course work, (b) achieved the minimum score on the GRE General Test for graduate admissions, and (c) submitting a thesis proposal (documented plan to complete a thesis) with the endorsement of a faculty thesis advisor. Students interested in the MS Program should meet with the Graduate Director prior to application.

#### MASTERS THESIS

Getting Started – Students interested in the MS Program must first identify a faculty advisor and identify a thesis topic. Working with the advisor, the student will develop a thesis proposal consisting of research motivation, literature review, preliminary work and plan of thesis work (a Thesis Proposal template MSWord file is available through the Mechanical Engineering Graduate Office). Typically, a student will do an Independent Study (Appendix B.3) to develop the thesis proposal. In parallel, the advisor and student form a thesis committee, including a representative from the Mechanical Engineering Department, which will serve to evaluate the thesis proposal and thesis defense. When ready, the student will present and successfully defend the proposal to the committee. Upon successfully defending the thesis proposal, the student will sign a change of program form, moving them from the ME to MS Program. Thesis proposals should be completed and approved at least one week prior to the start of the term for which thesis credit is to be registered.

<u>Thesis Work and Credits</u> – MS students are expected to be self-motivated, self-direct their thesis work and determine their own schedule. Students should expect to spend at least two semesters doing thesis work after successfully defending their thesis proposal. Only students with a fully approved thesis proposal are allowed to register for thesis credits (6 credits in total).

<u>Thesis Defense</u> – MS candidates must publicly defend their thesis. To this end, the candidate must arrange a two-hour time to defend their thesis in front of their thesis advisor, thesis committee members, a representative from the Mechanical Engineering Department, and anyone else who wishes to witness the defense. The candidate must send an advisor-approved FINAL THESIS DRAFT to their committee at least 2 weeks prior to the defense. The candidate prepares a formal presentation and a one-paragraph abstract to be used to announce their defense. The candidate will defend their thesis in public. After the general audience is invited to ask questions, they will be excused and only the committee members and departmental faculty will remain for further questioning. Thesis presentations may be closed to the public if the topic is proprietary.

The thesis committee will arrive at a consensus of one of the following outcomes of your defense and the candidate will be notified immediately after their defense:

**Conditional Pass** - The defense has been deemed a success. Minor corrections and/or revisions may be required. Theses revisions will be communicated to the candidate by their thesis advisor. The candidate must complete the revisions to their advisor's satisfaction within 10 working days.

**Adjournment** - While the defense was productive, the committee has determined that significant revisions are required. The nature of theses revisions will be communicated to the candidate in writing by their thesis advisor. The candidate must complete the revisions to their advisor's satisfaction. The thesis committee will reconvene to evaluate the revisions and decide if they are acceptable. At least one academic semester term must elapse between the adjournment and reconvening the committee.

**Failure** - The committee has deemed the defense to be unsuccessful. No thesis credits completed to date will be usable towards a degree. If the candidate wishes to complete a thesis, they must begin again with a new proposal. The candidate may apply for change of program to the master of engineering degree.

<u>Finishing Up</u> – MS students must have their thesis published electronically via ProQuest and provide confirmation to the Mechanical Engineering Department in order to graduate with an MS degree. To do so, submit through the RIT Wallace Library a PDF version of the approved FINAL THESIS (excluding handwritten signatures) and a PDF of the signature page to ProQuest. Bound personal copies of the thesis can be purchased through the Wallace Library. Forward the ProQuest confirmation email to Ms. Jill Ehmann as proof of completion. YOUR CERTIFICATION (I.E. GRADUATION) CANNOT BE COMPLETED WITHOUT THIS RECEIPT. For detailed thesis completion instructions, refer to <a href="https://infoquides.rit.edu/thesis-services">https://infoquides.rit.edu/thesis-services</a>.

#### **GRADUATE COOPERATIVE EDUCATION**

Cooperative education, or co-op, gives students the opportunity to gain meaningful work experience before graduation. Co-op helps students further define their career path and fully realize the value of what is being learned in the classroom. Co-op is the keystone to RIT's experiential education and is optional for graduate students (dual degree students will need to fulfill their undergraduate co-op requirements). Graduate co-op is primarily intended for full-time students in the ME program; students in the MS program may participate in graduate co-op but only upon prior approval of their thesis advisor and Graduate Director. All co-op job offers must be reviewed and approved by the Graduate Director before being accepted by the student.

<u>Eligibility</u> – Graduate students must have completed at least 18 credits of full-time graduate study, maintain at least a 3.0 CGPA, and the work experience must be in your field of study as part of your established curriculum. International students may be eligible to work in the United States, subject to their visa and Graduate Director approval, under Curricular Practical Training (CPT) for up to 364 days.

For more information, contact:

RIT Co-op and Career Services: <a href="https://www.rit.edu/emcs/oce/">https://www.rit.edu/emcs/oce/</a>

RIT International Student Services: <a href="https://www.rit.edu/studentaffairs/iss/">https://www.rit.edu/studentaffairs/iss/</a>

#### **GRADUATE PROGRAM POLICIES**

KGCOE graduate program policies, including academic honest, grading, adding/dropping courses among others, can be found in the KGCOE Graduate Student Handbook (found on the Mechanical Engineering Website under Student Resources). Listed below are additional policies not found in the KGCOE Graduate Student Handbook:

<u>Leave of Absence/Institute Withdrawal</u> – A full-time student may withdraw from all courses in a semester term by taking a Leave of Absence or withdrawing from RIT (Institute Withdrawal).

A **Leave of Absence** should be filed by students who are withdrawing from all classes in a semester term, but who intend to return to study at RIT within three semesters. This will commonly be done for students deploying for military service, facing illness or needing personal leave.

An *Institute Withdrawal* should be filed by students who are withdrawing from all classes in a semester term, and do not intend to return to RIT. Students must apply for readmission if they wish to return to RIT.

Generally, we recommend that students file a Leave of Absence rather than an Institute Withdrawal so that they can return to RIT more easily if they need to. A leave of absence cannot extend beyond three consecutive semesters (including summer semester term) of the semester in which the student was most recently registered. If a longer period is needed, the student should withdraw from the Institute and re-apply through the Admissions Office when appropriate.

<u>Application for Graduation</u> – Students will receive an email from Office of the Registrar to submit an Application for Graduation approximately 2 terms prior to your expected graduation. The Application for Graduation is located in your SIS account in the dropdown menu under other academic. All students are required to complete an Application for Graduation to be certified for their degree.

#### **GRADUATE STUDENT FINANCIAL SUPPORT**

<u>Merit Scholarship</u> – The Merit Scholarship recognizes first-year graduate students with outstanding academic records, credentials and accomplishments. The scholarship is awarded as a tuition discount for the student's first year of study. After the first year, Merit Scholarships in the form of tuition remission will be given based on program GPA to those students whom have completed a minimum of 21 credits toward their MECE graduate degree and are in good academic standing (Figure 3):

Tier 1	3.00 ≤ Program GPA < 3.33	10% Merit Scholarship
Tier 2	3.33 ≤ Program GPA < 3.67	20% Merit Scholarship
Tier 3	3.67 ≤ Program GPA ≤ 4.00	30% Merit Scholarship

Figure 3: Graduate Merit Scholarship

Eligible students will be awarded scholarships for the next academic year based on program GPA and informed by the MECE graduate office. The awarded scholarship will be applied for the next academic year and only for that year. In the event a student receives scholarship from other sources, eg. Support from faculty for research, the largest percent scholarship will supersede the others (merit scholarship cannot add onto other scholarship).

<u>Teaching Assistantship</u> – Graduate teaching assistantships (GTA) are paid to students by the department to assist faculty instruction. The department will announce openings typically twice per year and accepts applications from interested undergraduate and graduate students. Positions are available to graduate students in good academic standing after their first year at RIT.

Research Assistantship — Graduate research assistantships (GRA) are typically paid by a specific professor from externally sponsored programs and contracts. A GRA is not considered employment, but rather financial support of a student's research. The GRA is not intended to compensate a student for all hours spent working on their thesis research, but is intended to partially defray the student's cost of attendance, in order to allow them to focus more time and effort on their research. Graduate students must maintain a GPA over 3.0 in order to qualify for a GRA. GRAs require the graduate student to work on their research at a rate of *at least* 20 hours per week including all weeks that classes are in session, finals week, and the break week between academic terms. Dual degree student should note that tuition remission may replace (not add to) certain scholarships you may already be receiving. Dual degree students must be at year level 6 to qualify for a GRA. GRA appointments are for one academic term at a time and require a positive work evaluation by the supervising faculty member and continued good academic standing by the student. The supervising faculty member selects GRA appointees. Students on a 20 hour per week GRA are not eligible for other employment or GTA support, on-campus or off-campus. Students on a GRA must be full-time students.

#### **IMPORTANT MECHANICAL ENGINEERING CONTACTS**

The staff and faculty in the Department of Mechanical Engineering is here to help graduate students succeed!

<u>Graduate Director, Dr. Michael Schrlau</u> – The Graduate Director serves as the faculty advisor for all new graduate students (the undergraduate faculty advisor remains the faculty advisor for dual degree students). The Graduate Director is a student's first point of contact for anything related to the mechanical engineering field and can assist with course selection, issues with course work, co-ops, course content and/or career choices.

<u>Graduate Advisor, Ms. Jill Ehmann</u> – The Graduate Advisor assists students with course scheduling, academic performance issues, transfer credit and/or life at RIT. The Graduate Advisor is the student's first point of contact for anything related to registration and degree completion requirements. Staff advisors are well aware of the various resources available around the campus and can help students connect with study centers and assistance resources of both an academic and personal nature.

#### MECHANICAL ENGINEERING STAFF

Dr. Risa Robinson, Department Head

ME Office: GLE 2103, rjeme@rit.edu, x55181

Dr. Alan Nye, Associate Department Head ME Office: GLE 2106, <a href="mailto:ahneme@rit.edu">ahneme@rit.edu</a>, x55181

Dr. Michael Schrlau, Graduate Director,

ME Office: GLE 2111, alceme@rit.edu, x52139

Jill Ehmann, Senior Staff Specialist

ME Office: GLE 2123, jceeme@rit.edu, x57213

William Finch, Mechanical Engineering Systems Administrator GLE 2242, wgfiee@rit.edu, x52964

Christie Leone, Student Services Coordinator ME Office: GLE 2113, <a href="mailto:chleme@rit.edu">chleme@rit.edu</a>, x57489

Jan Maneti, Mechanical Engineering Department Operations Manager

Machine Shop: GLE 2361, jameme@rit.edu, x57718

Brittany Pasquale, Senior Staff Assistant GLE 2125 bapeme@rit.edu, x55181

## APPENDIX A: EXAMPLE PLANS

Master of Engineering Program – Example #1

Year	Fall Term	Spring Term	Summer Term
1	MECE-707 Engr Analysis MECE-XXX Focus/Elective MECE-XXX Focus/Elective	MECE-709 Adv Engr Math MECE-XXX Focus/Elective MECE-XXX Focus/Elective MECE-XXX Focus/Elective	Graduate Co-op
	Project with Paper Option		
2	Graduate Co-op	MECE-XXX Focus/Elective MECE-XXX Focus/Elective MECE-792 Project w/ Paper	Begin Career!
Graduate Internship Option		20g caroon	
	MECE-777 Grad Internship	MECE-XXX Focus/Elective MECE-XXX Focus/Elective	

Master of Engineering Program – Example #2

Year	Fall Term	Spring Term	Summer Term
1	MECE-707 Engr Analysis MECE-XXX Focus/Elective MECE-XXX Focus/Elective MECE-XXX Focus/Elective	MECE-709 Adv Engr Math MECE-XXX Focus/Elective MECE-XXX Focus/Elective	Graduate Co-op
2	MECE-XXX Focus/Elective MECE-XXX Focus/Elective MECE-792 Project w/ Paper	Graduate Co-op	Begin Career!

Master of Science Program

Year	Fall Term	Spring Term	Summer Term
1	MECE-707 Engr Analysis MECE-XXX Focus/Elective MECE-XXX Focus/Elective MECE-XXX Focus/Elective	MECE-709 Adv Engr Math MECE-XXX Focus/Elective MECE-799 Independent Study leading to proposal	Research
2	MECE-790 Thesis MECE-XXX Focus/Elective	MECE-790 Thesis Defend thesis	Begin Career!

### **APPENDIX B.1: PROJECT WITH PAPER**

### Rochester Institute of Technology Mechanical Engineering

Project with Paper Proposal, MECE-792 (3 CREDITS)

Student:	UID #:
Project Title:	
Faculty Sponsor:	
Date of Application:	Semester:
Please attach a typed statement of Objective 40% midterm report, 40% final report, 20%	s, Description of Proposal and Method of Evaluation. (e.g., oral presentation)
Approved by Graduate Student:	Date:
Approved by Faculty Sponsor:	Date:
Approved by Graduate Director:	Date:

Note:

This form <u>MUST</u> be approved before the student can register for the course. After approval, the student and the advisor will be notified, and the original is scanned and filed in the student's department folder.

The student agrees that an Incomplete "I" grade can only be granted in unusual circumstances beyond the student's control, such as an illness, a grade of Incomplete may be assigned. In order to qualify for an Incomplete grade, the student will need to demonstrate that a situation that arose was unexpected and beyond the control of the student. Projects and courses by definition are to be scoped and defined such that they can be completed in one academic term. Simply not finishing work in ANY course is NOT an acceptable reason for granting an "I" grade. Course instructor permission alone is not sufficient reason to assign an "I" grade. All I grade petitions must be reviewed and approved by the department.

## APPENDIX B.2: GRADUATE INTERNSHIP

## Rochester Institute of Technology Mechanical Engineering

Graduate Internship Proposal, MECE-777 (3 CREDITS)

Student:	UID #:
Internship Title:	
	Semester:
Internship Company Name:	
Please attach a typed description of the internation	nship and specific responsibilities/duties to be performed.
Approved by Graduate Student:	Date:
Approved by Company Supervisor:	
Approved by Graduate Director:	_Date:

### **APPENDIX B.3: GRADUATE INDEPENDENT STUDY**

### Rochester Institute of Technology Mechanical Engineering

Graduate Independent Study Proposal, MECE-799 (3 CREDITS)

Student:		UID #:
Project Ti	tle:	
Faculty Sp	ponsor:	
Date of A	pplication:	Semester:
	ach a typed statement of Objectives erm report, 40% final report, 20% of	s, Description of Proposal and Method of Evaluation. (e.g., oral presentation)
Approved	by Graduate Student:	Date:
Approved	by Faculty Sponsor:	Date:
Approved	by Graduate Director:	Date:
Note:	This form MUST be approved	d before the student can register for the course. After

approval, the student and the advisor will be notified, and the original is scanned and filed in the student's department folder.

The student agrees that an Incomplete "I" grade can only be granted in unusual circumstances beyond the student's control, such as an illness, a grade of Incomplete may be assigned. In order to qualify for an Incomplete grade, the student will need to demonstrate that a situation that arose was unexpected and beyond the control of the student. Projects and courses by definition are to be scoped and defined such that they can be completed in one academic term. Simply not finishing work in ANY course is NOT an acceptable reason for granting an "I" grade. Course instructor permission alone is not sufficient reason to assign an "I" grade. All I grade petitions must be reviewed and approved by the department.