

Multidisciplinary Senior Design I: BIME/CMPE/EEEE/ISEE/MECE.497

Instructors	<p>Overall course coordinator: Dr. DeBartolo BME: Dr. Stiehl CE: Dr. Loui EE: Prof. Barrios ISE: Prof. Bonzo ME: Prof. Fly</p> <p>Each team will also be assigned a Guide, who will guide them through the design process for both semesters</p>
Weekly Expectations	<p>Students are expected to:</p> <ul style="list-style-type: none">• Check myCourses regularly, including reading the weekly email announcements.• Check in at least 3 times per week using a "daily standup". Your team and Guide should discuss an appropriate window for checking in - asynchronous standups are fine for your out of class standup.• The expected out-of-class effort for a workshop-style course at RIT is 1-3 hours of outside time per credit hour. This means that we are expecting you to devote 3-6 hours outside of class time to MSD each week.• Keep your Guide and client in your communication loops. MSD teams use Slack for within-team discussions.• Ask questions if you have them!
Schedule	<p>The MSD Schedule on the myCourses homepage provides a full-semester schedule, including day-by-day activities, broken down by MSD phase. The Global Files templates in EduSourced are broken down by the same phases. Any updates to the schedule will be communicated in the weekly course email announcements.</p>
WHAT we grade	<ul style="list-style-type: none">• Homework: Most MSD I online modules have an associated short homework meant to prepare you to come to class and work with your team. These are due at 8am on your class day. Late submissions will be marked so you get feedback, but not given grade credit.• Deliverables: we grade what is submitted to EduSourced and myCourses, and the justification for decisions/information contained within your documentation; and execution of demos/reviews. There is no "right answer", and we expect teams to discuss expectations with your guide and client regularly.• Process: we grade your application of design process to your project, ideally in a proactive manner; how you work as a part of a team to move the project ahead, and how you address and reflect on the inevitable problems and surprises learning opportunities you will see along the way.• The artifacts and behaviors we will be inspecting/evaluating for each phase/sprint are laid out on the "Expected Work" section below. If you think your team requires an exception, discuss this with your guide in advance

HOW we grade	You earn grades as individual students (as opposed to by team), using the rubric on the "Grade Level Expectations" tab. The focus is not on finding "the right answer", but on applying a structured thought process to arrive at a solution that adds value for your client and documenting that work so we understand your rationale. We have developed these expectations in a way that allows us to accommodate project-by-project variability. As a rule, we do not round final course grades in MSD.
Communication	<ul style="list-style-type: none"> • Each week, typically on Friday, you will receive email announcements to help you prepare for the upcoming week. This will be a combination of written and video announcements. The use of email for these sorts of one-way communications allows us to reserve in-class time for teamwork. • We will communicate short, time sensitive, mid-week information through the MSD I Slack workspace. • In addition to workspace-public MSD Slack channels where you can ask/answer questions, each team will have a private channel for things like individual standup meetings and communications with the MSD office. Your team can create additional private channels just for your group.
Attendance	Attendance and active synchronous participation are required in MSD I; you are part of a team, and your team needs you. Before a planned absence from a team meeting (e.g., job interview), communicate with your team and guide, and plan to have your work posted in advance. In case of an unplanned absence (e.g., illness, personal emergency), communicate with your guide and team as soon as realistically possible.
Health & Safety	<ul style="list-style-type: none"> • If you need to miss class due to illness, we will handle it on a case-by-case basis. Communicate with your team and guide as soon as is practical. Don't come to class sick: stay home and participate via Zoom if you're able. • Shop rules apply in the Design Center: wear closed-toe shoes, use safety glasses when working with or near anything that might generate flying debris, and report accidents to the office if they occur. A first aid kit is located just outside the MSD office. • Food & prototypes don't mix! Eating is allowed in the lounge areas at the north and south end of the floor. Drinks with covers are allowed anywhere in the Senior Design Center. Please clean up after yourself before you leave the floor.
Starfish	We use Starfish to send out early alerts when we are concerned about any student's performance in class and regular communication from your Guide hasn't been able to resolve the situation. Early alerts are meant to help your network of faculty and staff advisors give you the guidance and support you need to be successful in your classes.
Academic Honesty	All students are expected to abide by RIT's Academic Honesty policy. While MSD doesn't have homework and tests like other classes, academic honesty also includes behaviors like giving and taking appropriate credit for work done, and honesty in communication. Academic Honesty violations will result in grade penalties.

Use of AI Tools	<p>The use of AI tools like ChatGPT is permitted in some applications and can be a valuable tool for you in MSD: reword jargon-y explanations in plain language, make writing more concise, and even help with creative brainstorming. If you use these tools, attribute the work properly, and think critically about the accuracy and applicability of the responses you get.</p> <p>Talk with your client about any planned use of AI tools related to project content. Client confidential information should <i>never</i> be entered into AI tools.</p>
Extenuating Circumstances	<p>We recognize that your life outside of school can have an impact on your performance in class. If you are having issues with food insecurity, safe housing, access to a reliable computer or internet connection, or are otherwise concerned about your own physical or mental health and safety, please contact one of RIT's confidential resources or ask your academic advisor or an MSD staff member about those resources.</p>

Weight	Phase	Expected Work & Demonstrated Activities	
5%	n/a	Homework assignments related to online modules	
		Deliverables 65% (Quantity and quality)	Process 35%
20%	Phase 1 Problem Definition	<u>Individual Contributions to Phase-Specific Artifacts:</u> <ul style="list-style-type: none"> Design review materials (phase-end PowerPoint presentation, any additional handouts provided during review) Phase End Summary Document (with supporting evidence and links) <u>Individual Artifacts:</u> <ul style="list-style-type: none"> Peer reviews Individual phase reflection 	<u>Phase-Specific Behaviors:</u> <ul style="list-style-type: none"> Use of phase-specific tools to achieve project outcomes Appropriate engagement of customer Use of feedback Execution of phase-end review with customer Completion of phase-end retrospective with guide <u>General Individual Process Behaviors:</u> <ul style="list-style-type: none"> Adherence to team norms and values Professional behavior Effective communication Response to feedback Fulfillment of team role Use of reflection for continuous improvement
25%	Phase 2 Typically: System Level Design	<u>Individual Contributions to Phase-Specific Artifacts:</u> <ul style="list-style-type: none"> Design review materials (phase-end PowerPoint presentation, any additional handouts provided during review) Phase End Summary Document (with supporting evidence and links) <u>Individual Artifacts:</u> <ul style="list-style-type: none"> Peer reviews Individual phase reflection 	<u>Phase-Specific Behaviors:</u> <ul style="list-style-type: none"> Same as above, plus: Appropriate update of requirements that maintains proper flow-down: customer => system => subsystems Proper use of risk assessment tools Project planning and tracking <u>General Individual Process Behaviors:</u> <ul style="list-style-type: none"> Same as above

25%	Phase 3 Typically: Preliminary Detailed Design	<u>Individual Contributions to Phase-Specific Artifacts:</u> <ul style="list-style-type: none"> • Design review materials (phase-end PowerPoint presentation, any additional handouts provided during review) • Phase End Summary Document (with supporting evidence and links) • Phase End Retrospective <u>Individual Artifacts:</u> <ul style="list-style-type: none"> • Peer reviews • Individual phase reflection 	<u>Phase-Specific Behaviors:</u> <ul style="list-style-type: none"> • Same as above • Project planning from Phase 3 forward includes task management <u>General Individual Process Behaviors:</u> <ul style="list-style-type: none"> • Same as above
25%	Phase 4 Typically: Detailed Design	<u>Individual Contributions to Phase-Specific Artifacts:</u> <ul style="list-style-type: none"> • Design review materials (phase-end PowerPoint presentation, any additional handouts provided during review) • Phase End Summary Document (with supporting evidence and links) • Phase End Retrospective <u>Individual Artifacts:</u> <ul style="list-style-type: none"> • Peer reviews • Individual phase reflection 	<u>Phase-Specific Behaviors:</u> <ul style="list-style-type: none"> • Same as above <u>General Individual Process Behaviors:</u> <ul style="list-style-type: none"> • Same as above

Grade Level Expectations

Phase grades in myCourses

Letter	Value	Description
A+	100	<ul style="list-style-type: none"> Deliverables: Completed and high quality, with all decisions supported by sound judgement and evidence. Process: Used process tools to connect project activities and determine the work that needs to be done, use of tools is proactive not reactive, documentation is clear and easy to find on the team's EduSourced site at the time of the review, and review is conducted in a highly professional manner. Student took individual ownership of the project by consistently demonstrating initiative, persistence, and professional behavior
A	95	
A-	92	
B+	88	<ul style="list-style-type: none"> Deliverables: Mostly completed and high quality, most decisions are supported by sound judgement and evidence, but some may require more explanation or understanding. Process: Use of process tools was reactive rather than proactive and sometimes shows connections across project activities, documentation mostly complete on EduSourced, and review is handled well. Student took some ownership of the project by demonstrating periodic initiative, persistence, and professional behavior.
B	85	
B-	82	
C+	78	<ul style="list-style-type: none"> Deliverables: Mostly acceptable, incomplete in some areas, or decisions have been made without supporting evidence. Process: haphazardly followed, not intelligently or effectively applied, review lacking in professionalism. Student lacked ownership of the project by seldom demonstrating initiative, persistence, or professional behavior. Student performed assigned work, but did not help to define the work.
C	75	
C-	72	
D+	68	<ul style="list-style-type: none"> Deliverables: Most are incomplete, incorrect, or include decisions made without any supporting evidence. Process: Process was not followed; work may have been done but not documented. Student was assigned work to do but did not complete it, does not exhibit professional behavior
D	65	
D-	62	
F	0	Guide reserves the right to assign a score between 0 and 59% if little or none of the work has been done.

Cutoffs In SIS	A	A-	B+	B	B-	C+	C	C-	D	F
	93	90	87	83	80	77	73	70	60	<60