

1st Year Launcher Course

- Build foundation of EM
- Practice design thinking
- Reflect as an engineering skill
- Folio thinking

BME Core Courses

- Have EM experiences
- Build a library of experiences and artifacts

3rd Year Storytelling Course

- Integrate and reflect on experiences
- Create and curate unique stories of EM growth
- Story-Driven Learning (SDL)

Learn about it, try it out, habitually reflect Practice behaving like an EM engineer

See yourself as an EM engineer

CURRICULUM STRUCTURE

FRESHMAN LAUNCHER COURSE

- The course title: "Design Your BME"
- Establishes a culture of EML and portfolio thinking
- Students apply design thinking skills to technical content and to their future learning experience

MIDDLE YEARS' COURSES

- The 3Cs will be emphasized in all required courses
- Experiences and achievements will be documented.
- Students will write, share, and store reflections and artifacts about their most significant experiences

PORTFOLIO CAPSTONE COURSE

- This will be a collaborative storytelling course
- Students will generate and share multiple creative non-fiction stories about their journey to become an engineer with an entrepreneurial mindset

1000 – Intro to BME

2210 – Conservation Principles in BME
2250 – Problems in BME
2310 – Intro to BME Design
3100 – Systems Physiology
3110 – Quant. Eng. Physiology Lab I

4000 – The Art of Telling Your Story



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Gateway Course	Signature Assignment Description	Potential artifacts for portfolio from signature assignment	Topic for outside experiences pulled into the signature assignment or course	Social pedagogy incorporated into signature assignment
1000 – Intro to BME	Creating the BMED 1000 portfolio focused on EM growth over first semester	 Reflections BME Insider Activity Two design projects 	Practical competence	 BMED 1000 showcase with feedback from showcase attendees
2210 – Conservation Principles in BME	Raise curiosity of bias in engineering and use this to identify opportunities to create value for others	Reflections	Interpersonal experiences	 Peer feedback Compile all products into a public collection to share
2250 – Problems in BME	A series of reflections based on EM at each phase of project	Reflections	Team experiences	 Peer feedback on final reflection pitches Teamwork feedback discussions
2310 – Intro to BME Design	Teams create a pitch video to communicate opportunity identified, solution, and value proposition	 Video Team website (extra credit) 	 Persistence and learn through failure - connected through DEEM chart and reflection 	 Share videos Design feedback from peers and users
3100 – Systems Physiology	New England Journal of Medicine case study analysis	Analysis of the case analyses over the course of the semester	Career path	 Problem solving studio format with case discussions
3110 – Quantitative Eng. Physiology Lab	Learning from difference working on teams to create value with 3Cs in a journal club	Reflections and video	• Learning from differences- forming a team to create the most value	• Sharing their experiences across groups and peer feedback
Academic Office Workshops/Activities	Various topics depending on workshop, internship reflections, research experience reflections	PitchPortfolioLinkedIn	Professional development	 Practice at workshops, presentations with feedback
4000 – The Art of Telling Your Story	Creating the EM growth portfolio (a collection of autobiographical stories)	 Anything from their library of artifacts and stories 	SUMMATIVE	Story Showcase