Mechanical Engineering PhD Plan of Study

Student Name: Dane Sabo 7-digit ID: 4368326 Date: 7/2/25

Advisor Name: Daniel G. Cole Semester Start Term: Fall 2023

BS Major: Mechanical Engineering MS Major: n/a

Full-Time Student: (Y/N): Y Pitt TA/RA Appointment (Y/N): Y

Category	Course#	Course Name	Credits	University	Semester	Grade
Math Req: 1	ME 2646	Linear System Theory	3	Pitt	Fall 2023	A-
Didactic Courses: 2	ME 2045	Linear Control Systems	3	Pitt	Fall 2023	A
3	ME 2020	Mechanical Vibrations	3	Pitt	Spring 2024	A
4	ME 2027	Advanced Dynamics	3	Pitt	Spring 2024	A
5	ME 2811	Innovating for Public Impact	3	Pitt	Spring 2024	A
6	NUCE 2103	Integration of Nuclear Plant Systems...	3	Pitt	Summer 2024	A
7	ME 2016	Nonlinear Dynamical Systems	3	Pitt	Fall 2024	A
8	NUCE 2100	Fundamentals of Nuclear Engineering	3	Pitt	Fall 2024	B
9	ME 2046	Digital Control Systems	3	Pitt	Spring 2025	A
10	ME 2150	High-Assurance Cyber-Physical Systems	3	Pitt	Spring 2025	A
11	NUCE 2113	Radiation Detection and Measurement	3	Pitt	Spring 2025	A
12 or Professional Preparation	NUCE 2122	Management Principles in Nuclear Power	3	Pitt	Summer 2025	A
Total Research Credits	ME 3997	Research, PhD	18?	Pitt		S
Additional Courses	NUCE 2125	Case Studies in Nuclear Codes and Standards	3	Pitt	Fall 2025	TBD
Including Block						
Transfer Cr.						
Dissertation Credits	ME 3999	PhD Dissertation (12 Cr min)	15	Pitt		

PRELIM/QUAL EXAM DATE: 12/17/2024 Total Credits: 72 Final QPA: 3.886?

PROPOSAL DATE: 12/17/2024? Full-Time Residency Year: 2023, 2024

Student Signature:

Advisor Approval Signature:

ME GC Approval Signature:

Notes: **DRAFT**

During the First Term: Under the guidance of the student's major advisor, the student will prepare a PhD Plan of Study. List transferred MS coursework that satisfies the didactic course requirements and assign "T" as the grade. External courses will not count toward the Pitt QPA.

Each Year: The student will submit the updated Plan of Study to their advisor during the PhD yearly review.

Proposal Term: The student will submit the signed final document to the GA along with the Pre-Proposal documents.

Completion of the PhD program requires a total of 72 credits:

- At least 36 credits (12 courses) must be didactic (classroom based) courses – ME 2095/2097/3095 do not count as didactic courses (unless specifically approved) – Only one professional preparation course (i.e. ME/ENGR 2052 or ME 3100) may count toward the 36 credits didactic coursework requirement.
- At least 18 credits of dissertation research consisting of – ME 3997 - Research, PhD, must be taken before admission to PhD candidacy, which is granted upon passing the Proposal Exam.
- A minimum 12 credits of ME 3999 are required after admission to PhD candidacy.
- One year of full-time residency/enrollment is required for all PhD students.
- QPA requirement: Students must maintain a minimum cumulative QPA of 3.30 in courses to be eligible to take the Preliminary and Proposal examinations and to graduate.
- All full-time students must enroll in ME 2085 Graduate Seminar and attend the seminars in each semester. Students who have teaching assistant duties or conflicts with other graduate classes can request an excuse to not register for ME 2085 in the semester of the conflict.
- Full-time students should plan to take 12-15 credits a semester.
- All 72 credits should be complete in 4 years (8 terms). This is mandatory for funded students.
- PhD candidates who met all credit requirements as outlined above but have not completed their research should enroll in zero-credit Full Time Dissertation (FTDH) until their final defense and graduation. FTDH students should not enroll in Grad Seminar but are encouraged to attend. No other courses can be taken after transitioning to FTDH.

Other requirements apply depending upon the student's path to the PhD degree as detailed below:

Direct entry to the PhD program with a BS degree: Students who are admitted to the PhD program directly after completing their BS degree must meet the following course requirements in addition to the general course requirements.

- At least 18 course credits (six courses) must come from mechanical engineering (ME) specific didactic graduate courses. Professional preparation courses do not count toward ME-specific courses.
- At least one of the following mathematics courses: – ME 2001 - Differential Equations – ME 2002 - Linear and Complex Analysis – ME/ECE - 2646 Linear System Theory 1

Entry to the PhD program with an MS degree:

- Students holding a MS degree in mechanical engineering, or a closely related field must complete at least 12 course credits (four didactic courses) within the first year with a QPA of 3.3 or higher.
- Students holding a MS degree in a field not related to mechanical engineering must complete at least 12 credits from ME-specific graduate didactic courses with a minimum QPA of 3.3 or higher in their first year.
- Professional preparation courses do not count toward the minimum 12 graduate course credits req.
- Students who have not taken an equivalent graduate-level mathematics course are required to take one of the following mathematics courses: – ME 2001 - Differential Equations – ME 2002 - Linear and Complex Analysis – ME/ECE - 2646 Linear System Theory1. Any prior non-Pitt graduate level Math course must be approved by GC.