| | C Master of Science in | ertificate of D n Engineering - I | - | - | ineering | |
|--|---------------------------|--------------------------------------|---------------|---------------------|----------------------------|--|
| | Name | | | | | |
| | Hopkins ID# | | | | | |
| | Faculty Advisor | | | | | |
| | I am a | □ Master's student □ | | PhD student earlier | PhD student earning an MSE | |
| | Semester of Graduation | | | | | |
| | Last Semester Registered | | | | | |
| | Required Introductory | EN.500.603 | Title IX Anti | - p | Responsible | |
| | Courses | Academic Ethics | Harassment | Awareness | Conduct of Research | |
| | Semester Completed | | | | | |

SECTION A: Six courses, each 3-credits or more...

| Semester | Course Number | Course Name | Grade | Credits | Double Counted from JHU BS? | Is the Course Transferred from Another Institution? | Math Course? |
|----------|------------------|-------------|-------|---------|-----------------------------------|---|-----------------|
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...<u>plus</u> two to four courses, 6 or more total credits, any combination of these:

- Two 3 or 4-credit courses from any department other than the Center for Leadership Education
- One 3 or 4-credit course from any department and 3 credits from the Center for Leadership Education (1.5-3 credits each)
- 6 credits from the Center for Leadership Education courses (1.5-3 credits each)

Center for Leadership Education courses are numbered EN.660.xxx, EN.661.xxx, EN.662.xxx, and EN.663.xxx.

| Semester | Course Number | Course Name | Grade | Credits | Double Counted from JHU BS? | Is the Course Transferred from Another Institution? | Math Course? |
|----------|------------------|-------------|-------|---------|-----------------------------------|---|-----------------|
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- Please see the Master's Advising Manual for all requirements, not all may be listed here.
- At least 12 credits must be at the graduate level (xxx.600 or higher).
- No more than two courses from undergraduate programs can double-count for the master's degree.
- □ No more than four courses may be at the advanced undergraduate level (xxx.400 xxx.499).
- At least two courses should be in applied mathematics, numerical analysis, or computational methods ("Math Course?" above). This requirement can be waived in writing by your advisor, if sufficient prior preparation in these areas can be demonstrated.
- At least 4 courses if taking an "all-course" option, or at least 3 if writing an essay - must be Mechanical Engineering: either - all EN.530.xxx Mechanical Engineering or EN.535.xxx Engineering for Professionals' Mechanical Engineering or other approved courses listed in Section 3.2 of the Master's Advising Manual.
- Ineligible Courses: AS.370.602 American English Pronunciation, AS.370.603 Public Speaking for Academia, EN.530.800
 Independent Study, EN.530.801/802 PhD Graduate Research, EN.530.820 MSE Graduate Research, EN.530.821/822 MSE Essay, EN.530.823 MSE Graduate Research, and all other departments' Graduate Research, Independent Study, and Special Studies are <u>not</u> eligible courses to complete Section A's requirement. See Section B to see how Graduate Research could be counted.
- EN.535.xxx Engineering for Professionals (EP) program. no more than two "EP" courses count.
- □ A course is satisfactorily completed if a grade from A+ to B- is obtained. Grades of C+ or lower are evidence of unsatisfactory academic performance. If necessary, one course with a C+, C, or C- final grade can be counted toward the degree.
- "Pass" or "P" grades are not accepted. Exceptions are available for courses taken in Spring 2020, Fall 2020 or Spring 2021. See the Master's Advising Manual for details.

SECTION B: Complete either the "Course Option" or the "Essay Option" but not both.

Course Option

Two additional one-semester courses, at least 6 total credits, approved by the faculty advisor.

- Two additional one-semester graduate-level courses (xx.xxx.6xx or higher).
- EN.530.820 MSE All-Course Graduate Research or EN.530.823 MSE Graduate Research*
 - **BS/MSE and MSE students only:** one of these two courses can be EN.530.820 or EN.530.823. Students must also have completed the appropriate Responsible Conduct of Research and Research Laboratory Safety courses.
 - **PhD students** earning the MSE degree <u>cannot</u> count EN.530.820 or EN.530.823.
- Ineligible Courses: EN.530.800 Independent Study, EN.530.821 Master's Essay Research and Writing, EN.530.822 Master's Essay Co-Op, and all other departments' Graduate Research, Independent Study, and Special Studies are not eligible courses to complete Section B's requirement.

| Semester | Course Number | Course Name | Grade | Credits | Double Counted from JHU BS? | Was the Course taken as a JHU undergrad? | Is the Course Transferred from Another Institution? | Is this a Math Course? |
|----------|------------------|-------------|-------|---------|--------------------------------------|--|--|------------------------------|
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* If counting EN.530.820 MSE All-Course - Graduate Research or EN.530.823 MSE Graduate Research, complete this section.

| Requirement | Date or Semester Completed / Training Description |
|--|---|
| AS.360.624 (online) or AS.360.625 (in-person, for NIH funded) | |
| Responsible Conduct of Research. Proof must be provided with this form | |
| through SIS or copy of online certificate. | |
| Research Laboratory Safety – date completed and briefly describe | |
| training done. | |

Essay Option

Write an essay acceptable to the faculty advisor and one other reader, plus these requirements:

| Requirement | Date or Semester Completed / Training Description |
|--|---|
| AS.360.624 (online) or AS.360.625 (in-person, for NIH funded) | |
| Responsible Conduct of Research. Proof must be provided with this form | |
| through SIS Registration or copy of online certificate. | |
| Research Laboratory Safety – date completed and briefly describe | |
| training done. | |
| EN.530.821 Master's Essay - Research and Writing or | |
| EN.530.822 Master's Essay - Co-Op or | |
| EN.530.823 MSE Graduate Research | |
| Six credits (one 6-credit or two 3-credit courses). | |
| List the semester(s) and number of credits for each course(s) completed. | |

Essay Title: _____

ADVISOR'S CERTIFICATION

After reviewing the degree requirements, I am satisfied that this student has completed all of the requirements for the Master of Science in Engineering Degree in the Department of Mechanical Engineering.

| Advisor's : | Signature |
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