Standing Requirements

Program Mission Statement

The program's first objective is to prepare students for professional careers in industry and government at the M.S. degree level, now regarded as essential for professional duties in the field (Civil Engineering Body of Knowledge for the 21st Century, Preparing the Civil Engineer for the Future, 2nd Edition, ASCE). In addition, the program will seek to increase the potential for external research funding with the involvement of thesis option students supported by externally funded research projects.

The MS CIV degree is a 30-credit program offered as a general M.S. Civil Engineering degree with a thesis or non-thesis option. The thesis option will consist of fifteen (15) credits of core courses, six (6) credits of elective courses, and nine (9) thesis credits. The program of study is intended to be completed over three semesters plus the summer semester for research. The non-thesis option will consist of the fifteen (15) credit core course curriculum plus fifteen (15) elective credits in an advisor-approved program of study. Each degree option may be pursued either as a five-year accelerated BS/MS program for ERAU Civil Engineering students, or as a three semester program for those with a BS from another institution or ERAU engineering discipline.

Last Modified: 05/13/2015 07:33:06 AM EDT

ERAU University Mission Statement

Our mission is to teach the science, practice and business of aviation and aerospace, preparing students for productive careers[1] and leadership roles in service around the world.[2]

Our technologically enriched, student-centered environment[3] emphasizes learning through collaboration and teamwork,[4] concern for ethical and responsible behavior,[5] cultivation of analytical[6] and management abilities,[7] and a focus on the development of the professional skills needed for participation in a global community.[8] We believe a vibrant future for aviation and aerospace rests in the success of our students. Toward this end, Embry-Riddle is committed to providing a climate that facilitates the highest standards of academic achievement[9] and knowledge discovery,[10] in an interpersonal environment that supports the unique needs of each individual.[11] Embry-Riddle Aeronautical University is the world's leader in aviation and aerospace education. The University is an independent, non-profit, culturally diverse institution providing quality education and research in aviation, aerospace, engineering and related fields leading to associate's, baccalaureate's, master's and doctoral degrees.

Program Alignment to University Mission

Select all that apply.

- [1]Preparing students for productive careers
- [2]Preparing students for leadership roles in service around the world
- [3]Technologically enriched environment
- [4]Emphasize learning through collaboration and teamwork
- [5]Concern for ethical and responsible behavior
- [6]Cultivate analytical abilities
- [7]Cultivate management abilities
- [8]Develop the professional skills needed for participation in a global community
- [9]Facilitating the highest standards of academic achievement
- [10]Facilitating knowledge discovery
- [11]Providing an interpersonal environment that supports the unique needs of each individual

Standing Requirements

Program Outcomes

DB_MS Civil Engineering PO_A

Outcome

Outcome	Mapping
DB_MSCIV_PO_A Ability to apply fundamental civil engineering professional practices to analyze, design, and implement civil systems.	No Mapping
DB_MSCIV_PO_B Ability to apply knowledge of advanced topics in civil engineering, as appropriate to their chosen concentration.	No Mapping
DB_MSCIV_PO_C Ability to communicate effectively on issues pertaining to civil engineering.	No Mapping

Last Modified: 05/13/2015 07:44:57 AM

DB_MSCIV Indicator COurse to Student Outcomes Map

Courses and Activities Mapped to DB_MS Civil Engineering PO_A

	Outcome		
	DB_MSCIV_PO_A Ability to apply fundamental civil engineering professional practices to analyze, design, and implement civil systems.	DB_MSCIV_PO_B Ability to apply knowledge of advanced topics in civil engineering, as appropriate to their chosen concentration.	DB_MSCIV_PO_C Ability to communicate effectively on issues pertaining to civil engineering.
MS CIV Courses			
CIV 501 Transportation Systems Engineering	**P**	**P**	**P**
CIV 502 Bridge Engineering	**P**	**P**	**P**
CIV502 Environmental Engineering	**P**	**P**	**P**
CIV 504 Wind Engineering	**P**	**P**	**P**
CIV505 Design and Analysis of Airfield and Highway Pavement	**P**	**P**	**P**
CIV 700 Graduate Thesis	**M**	**M**	**M**

Legend : **I** Introduced **P** Practiced **M** Mastered

Last Modified: 05/13/2015 07:55:32 AM

DB_MS Civil Engineering

MS 2016-17

Courses and Activities Mapped to DB_MS Civil Engineering PO_A

	Outcome		
	DB_MSCIV_PO_A Ability to apply fundamental civil engineering professional practices to analyze, design, and implement civil systems.	**DB_MSCIV_PO_B** Ability to apply knowledge of advanced topics in civil engineering, as appropriate to their chosen concentration.	**DB_MSCIV_PO_C** Ability to communicate effectively on issues pertaining to civil engineering.
Courses and Learning Activities			
MS CIV Courses			
CIV 502 Wind Engineering	**M**	**M**	**M**
CIV 504 Bridge Engineering	**M**	**M**	**M**
CIV 506 Transportation Systems Engineering	**M**	**M**	**M**
CIV508 Environmental Engineering	**M**	**M**	**M**
CIV510 Design and Analysis of Airfield and Highway Pavement	**M**	**M**	**M**
CIV 700 Graduate Thesis	**M**	**M**	**M**

Legend : **I** Introduced **P** Practiced **M** Mastered

Last Modified: 05/11/2016 04:01:00 PM

DB_MSCIV ASSESSMENT_SCH

Courses and Activities Mapped to DB_MS Civil Engineering PO_A

	Outcome		
	DB_MSCIV_PO_A Ability to apply fundamental civil engineering professional practices to analyze, design, and implement civil systems.	DB_MSCIV_PO_B Ability to apply knowledge of advanced topics in civil engineering, as appropriate to their chosen concentration.	DB_MSCIV_PO_C Ability to communicate effectively on issues pertaining to civil engineering.
Courses and Learning Activities			
MS CIV Courses			
2016-2017 Assessment Cycle	✔	✔	✔
2017-2018 Assessment Cycle	✔	✔	✔
2018-2019 Assessment Cycle	✔	✔	✔
2019-2020 Assessment Cycle	✔	✔	✔
2020-2021 Assessment Cycle	✔	✔	✔
2021-2022 Assessment Cycle	✔	✔	✔

Legend : ✔ = Aligned

Last Modified: 08/30/2018 02:49:05 PM