Reed, Katie

From: Smith, Randy

Sent: Friday, June 23, 2023 3:57 PM **To:** Morrison, Shannon; Wade, CA

Cc: Andridge, Rebecca; Reed, Katie; Smith, Randy; Orr, James; Duffy, Lisa; Quinzon-Bonello,

Rosario; Tomasko, David

Subject: Proposal to revise the Aviation Engineering program

Shannon and Wade:

The proposal from the Center for Aviation Studies to revise the Aviation Engineering program was approved by the Council on Academic Affairs at its meeting on June 23, 2023. Thank you for attending the meeting to respond to questions/comments.

No additional level of internal approval is necessary. This action will be included in the Council's next <u>Annual Activities</u> <u>Report</u> to the University Senate (July 2023).

The Office of the University Registrar will work you with any implementation issues.

Please keep a copy of this message for your file on the proposal and I will do the same for the file in the Office of Academic Affairs.

If you have any questions please contact the Chair of the Council, Professor Rebecca Andridge (.1) or me.

Randy



W. Randy Smith, Ph.D.

Vice Provost for Academic Programs

Office of Academic Affairs

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College of Engineering

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Memo

To: Randy Smith, Vice Provost for Academic Programs

From: Rosie Quinzon-Bonello, Assistant Dean for Curriculum and Assessment

Date: May 1, 2023

Re: Program Change to the Aviation Engineering Program

On April 28, 2023, the College of Engineering Committee for Academic Affairs voted unanimously to approve the following changes to the Aviation Engineering Program

- The creation of Aviation 4520: Aviation Capstone-Aviation Engineering
- The addition of the bookend courses as part of the new university-wide changes to the general education requirements.
- General corrections to the major that occurred historically and are now being documented for consistency.

Attached is the proposal with a current curriculum sheet with tracked changes, and a clean proposed curriculum.

Yours sincerely,

Marin Ling - Bride Rosie Quinzon-Bonello



Center for Aviation Studies College of Engineering

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March 21, 2023

SUBJECT: Aviation Engineering Program Changes

PROPOSAL: The Center for Aviation Studies, as steward of Aviation-related curriculum across the College of Engineering, College of Arts and Sciences, and Fisher College of Business, has three changes which it wishes to note, in relation to the Aviation Engineering program:

- 1. The creation of Aviation 4520: Aviation Capstone-Aviation Engineering
- 2. The addition of the bookend courses as part of the new university-wide changes to the general education requirements.
- 3. General corrections to the major that occurred historically and are now being documented for consistency.

BACKGROUND AND RATIONALE:

- 1. The creation of Aviation 4520: Aviation Capstone-Aviation Engineering:
 - In 2021, CAS had its reaffirmation accreditation visit from the Aviation Accreditation Board, International. During the visit, it was recommended by the visiting team, that the program create a new capstone course that was specific to the engineering program.
 - CAS has submitted a request for a permanent number Aviation 4520: Aviation Capstone that will be specific to students completing the degree through the College of Engineering.
 - This new course will continue to be a capstone for the major but will allow the program to assess educational outcomes more easily, as per the recommendation of our accreditor.
- 2. The addition of the bookend courses as part of the new university-wide changes to the general education requirements.
 - Not embedding GE reflection bookend in capstone to be consistent with other majors in business and ASC.
 - Requiring reflection bookend is possible given aviation has less required hours.
- 3. General corrections to the major that occurred historically and are now being documented for consistency.
 - Increasing aviation electives from 12 to 15 requires more aviation specific coursework to prepare for aviation career.
 - Decreasing tech electives from 27 to 20 allows students more freedom in completing courses that better support desired aviation career.
 - AVIATN 4101(3) was split into AVIATN 4101(2) and 4102(2) and so AVIATN 4102 was added to PPC specialization and hours adjusted.
 - Overall program change allows net negative to total hours required in aviation major.

THE OHIO STATE UNIVERSITY

These proposed changes to the Aviation Engineering curriculum will allow our students to be able to move more effectively through the program and complete course work that is related to aviation technical concepts. Attached is an updated curriculum sheet with track changes, as well as a clean copy of the document. Thank you for your time, and we are appreciative of any consideration that may be extended to this request, in order to better serve our students. Please let me know if there are any additional questions.

Shannon Morrison, PhD
Assistant Director Academics and Program Assessment
Center for Aviation Studies
Morrison.413@osu.edu

Bachelor of Science

Aviation

• Aviation with Professional Pilot Certification (PPC)

Students in this major will complete a minimum of 124 hours outlined as follows.

Requirement	Course Options	Hours
GE Launch Seminar	GENED 1201	1
Foundations: Writing and Information Literacy	Student Choice	3
Foundations: Mathematical & Quantitative Reasoning/Data Analysis	Student Choice*	College requirement
Foundations: Literary, Visual and Performing Arts	Student Choice	3
Foundations: Historical & Cultural Studies	Student Choice	3
Foundations: Natural Science	Student Choice*	College requirement
Foundations: Social & Behavioral Sciences	Student Choice	3
Foundations: Race, Ethnic and Gender Diversity	Student Choice	3
Theme: Citizenship for a Diverse & Just World •	Student Choice	4
Theme: Student Choice	Student Choice	4
GE Reflection	Capstone"GENE	Embedded int Major-Core Capstone1
	Total	24-34 <u>25</u>

College / Degree Requirements		
Requirement	Course Options	Hours
MATH 1151*, 1172*, (Math & Quantitative Reasoning / Data Analysis)		10
PHYSICS 1250* (Nat Sci)		5
ENGR 1181.0x, 1182.0x		4
ENGR 1100.02		1
	Total	20

Major Coursework		
Course	Title	Hours
Major Core		
AVIATN 2000	Introduction to the Aviation Industry	3
AVIATN 2100	Private Pilot Fundamentals	5
AVIATN 2200	AVN Org. Analysis and Writing	3
AVIATN 2300	Aviation Weather	3
AVIATN 3000	Aviation Management & Marketing	3
AVIATN 3200	Aviation Regulations	3
AVIATN 3300	Human Factors and Safety	3
AVIATN 4500-4520	Aviation Capstone Aviation Engineering	3
	Total	26
Aviation, Technical, Free, or Specializ	ation Electives without PPC	17.7
Aviation Electives		42 <u>15</u>
Technical Electives		2 7 <u>20</u>
Free Electives or Specialization		15
	Total	5054
Aviation, Technical, Free or Specializa	ation Electives with PPC	
Student pursuing the Professional P	ilot Certification (PPC)	
PPC students will add the following courses which will taken in place of Aviation Electives (1215). Technical Elective and Free Elective hours are adjuste so that the total number of credit hours for the degree remain the same	AVIATN 2101(2), 2102(2), 2501(2), 3100(3), 3101(3) 4100(3), 4101(32), 4102(2), 4300(2), 5100(2), 5101(2), or 4301(2)	24 <u>25</u>
Technical Electives		2720
Free Electives or Special zation requirements		3 <u>5</u>
	Total	5450

AVIATION without PPC	
General Education	24-3425
College / Degree	20
Major Core	26
Aviation, Technical, or Specialization Electives	545G
Minimum Total Credit Hours for Degree	424121

AVIATION with PPC	
General Education	24-3425
College / Degree	20
Major Core	26
PPC courses in place of Aviation electives	2425
Technical, Free or Specialization Electives	3025
Minimum Total Credit Hours for Degree	124121



Bachelor of Science

Aviation

Aviation with Professional Pilot Certification (PPC)

Students in this major will complete a minimum of 121 hours outlined as follows.

General Education Requirements		
Requirement	Course Options	Hours
GE Launch Seminar	GENED 1201	1
Foundations: Writing and Information Literacy	Student Choice	3
Foundations: Mathematical & Quantitative Reasoning/Data Analysis	Student Choice*	College requirement
Foundations: Literary, Visual and Performing Arts	Student Choice	3
Foundations: Historical & Cultural Studies	Student Choice	3
Foundations: Natural Science	Student Choice*	College requirement
Foundations: Social & Behavioral Sciences	Student Choice	3
Foundations: Race, Ethnic and Gender Diversity	Student Choice	3
Theme: Citizenship for a Diverse & Just World ^b	Student Choice	4
Theme: Student Choice	Student Choice	4
GE Reflection	GENED 4001	1
	Total	25

College / Degree Requirements		
Requirement	Course Options	Hours
MATH 1151*, 1172*, (Math & Quantitative Reasoning / Data Analysis)		10
PHYSICS 1250* (Nat Sci)		5
ENGR 1181.0x, 1182.0x		4
ENGR 1100.02		1
	Total	20

Major Coursework		
Course	Title	Hours
Major Core		
AVIATN 2000	Introduction to the Aviation Industry	3
AVIATN 2100	Private Pilot Fundamentals	5
AVIATN 2200	AVN Org, Analysis and Writing	3
AVIATN 2300	Aviation Weather	3
AVIATN 3000	Aviation Management & Marketing	3
AVIATN 3200	Aviation Regulations	3
AVIATN 3300	Human Factors and Safety	3
AVIATN 4520	Aviation Capstone: Aviation Engineering	3
	Total	26
Aviation, Technical, Free, or Specializ	ation Electives without PPC	
Aviation Electives		15
Technical Electives		20
Free Electives or Specialization		15
	Total	50
Aviation, Technical, Free or Specializa	ation Electives with PPC	
Student pursuing the Professional P i	lot Certification (PPC)	
PPC students will add the following courses which will taken in place of Aviation Electives (15). Technical Elective and Free Elective hours are adjuste so that the total number of credit hours for the degree remain the same	AVIATN 2101(2), 2102(2), 2501(2), 3100(3), 3101(3) 4100(3), 4101(2), 4102(2), 4300(2), 5100(2), 5101(2), or 4301(2)	25
Technical Electives		20
Free Electives or Specialization requirements		5
	Total	50

AVIATION without PPC	
General Education	25
College / Degree	20
Major Core	26
Aviation, Technical, or Specialization Electives	50
Minimum Total Credit Hours for Degree	121

AVIATION with PPC	
General Education	25
College / Degree	20
Major Core	26
PPC courses in place of Aviation electives	25
Technical, Free or Specialization Electives	25
Minimum Total Credit Hours for Degree	121