

Attachment 2

Academic Affairs

Consent Agenda Supplemental Information - Curriculum Proposals

Faculty Senate Review – October 8, 2019 Meeting

In order by College, not by the Curriculum Agenda

<https://kstate.curriculog.com/agenda:796/form>

Technology & Aviation

Aeronautical Technology - Professional Aviation Option (B.S.) - New

Rationale: The availability and popularity of associate degrees and certificates in aviation has made it challenging to retain students in the bachelor degree program. A number of our students stop their education to pursue employment. Currently, a viable path does not exist that allows students to complete their bachelor degree if they leave early to begin work. The principal purpose in creating and offering this option is to retain some of the students who complete studies at the associate or certificate level and then decide to begin working. This degree will be an attractive option to students choosing to continue their education in aviation.

Impact (i.e. if this impacts another unit) – Statement should include the date when the head of a unit was contacted, and the response or lack of: No impact to other units.

Proposed: Bachelor of Science in Aeronautical Technology, Professional Aviation option 120 credit hours

The Professional Aviation option, Bachelor of Science in Aeronautical Technology provides students with knowledge and skills designed to enhance their employability and upward mobility in the aviation industry. This degree option has been specifically designed as a “degree completion program,” allowing undergraduate students who have completed an associate’s degree or certificate, or have a substantial number of completed courses in aviation, to continue their education and receive a bachelor of science degree. Courses can be taken online or face-to-face.

Graduates are prepared for a variety of aviation careers including supervisory and management roles in many aviation settings.

The Bachelor of Science in Aeronautical Technology, Professional Aviation option allows students transferring from two-year institutions to apply up to 35 credit-hours of their technical aviation specialty, as well as general education courses, for a total of 60 credit-hours transferrable to Kansas State.

Aviation Concentration (47 credit hours)

Basic Aviation Core – 35 hours

This block of courses includes course work normally taken during the first two years of an undergraduate program in the area of aviation. Courses accepted for transfer to K-State must be academic college-level courses from an accredited institution.

Additional Required Aviation Courses (12 hours)

AVT 440 Air Carrier Operations.....3

AVT 445	Aviation Law.....	3
AVT 450	Aviation Safety Management.....	3
AVT 497	Senior Capstone.....	3

Business and Management (21 credit hours)

BUS 315	Supervisory Management.....	3
BUS 400	Marketing Techniques and Applications	3
BUS 410	Managerial and Project Economics.....	3
BUS 420	Management Perspectives	3
BUS 530	Practices of Industrial and Labor Relations	3
COT 405	Methods of Problem Solving for Integrated Professional Studies	3
COT 480	Professional Conduct, Ethics, and Analysis	3

General Education courses (31 credit hours)

COMM 106	Public Speaking I	3
ECON 110	Principles of Macroeconomics.....	3
OR		
ECON 120	Principles of Microeconomics	3
ENGL 100	Expository Writing I.....	3
ENGL 200	Expository Writing II.....	3
ENGL 302	Technical Writing.....	3
MATH 100	College Algebra.....	3
MATH 150	Plane Trigonometry	3
PHYS 113	General Physics I.....	4
PSYCH 110	General Psychology.....	3
STAT 325	Introduction to Statistics	3

Electives (21 credit hours)

Aviation Elective.....	3
300+ Aviation Elective	3
300+ Aviation Elective	3
300+ Humanities/Social Science Elective	3
Humanities/Social Science/Business Elective	3
300+ Humanities/Social Science/Business Elective	3
Natural Science Elective	3

Student Learning Outcomes and Assessment Plan for Professional Aviation Degree Option

Program Outcome (University Outcome)	Program Learning Outcomes What do the program faculty expect all students to know, or be able to do, as a result of completing this program? v <ul style="list-style-type: none"> Note: These should be measurable, and manageable in number (typically 4-6 are sufficient) 	Assessment Mapping From what specific courses (or other educational/professional experiences) will artifacts of student learning be analyzed to demonstrate achievement of the outcome?	Assessment Methods What specific artifacts of student learning will be analyzed?	Use of Assessment Data How and when will analyzed data be used by faculty to make changes in pedagogy, curriculum design, and/or assessment work?
1. Demonstrate the ability to work on diverse multi-disciplinary teams. (Diversity)	Work effectively on multi-disciplinary and diverse teams	AVT 450	Final Evaluation of Teamwork skills	This will be reviewed yearly at the assessment meeting. This meeting occurs after the feedback report is received from the KSU Office of Assessment. The review will determine if the results are still valid and methods for improvement.
2. Demonstrate a global perspective on aviation industry practices. (Knowledge)	Apply knowledge of business sustainability to aviation issues.	AVT 440 Air Carrier Operations	Project	This will be reviewed yearly at the assessment meeting. This meeting occurs after the feedback report is received from the KSU Office of Assessment. The review will determine if the results are still valid and methods for improvement.
3. Choose ethical courses of action within the operational	Make professional and ethical decisions.	COT 480	Group Project	This will be reviewed yearly at the assessment meeting. This meeting occurs after the feedback report is received from

environment. (Professional integrity)				the KSU Office of Assessment. The review will determine if the results are still valid and methods for improvement.
4. Demonstrate a lifelong commitment to personal excellence through service and continuing education. (Knowledge)	Engage in and recognize the need for life-long learning.	AVT 497 Senior Capstone	Oral Presentation of portfolio and life-long learning	This will be reviewed yearly at the assessment meeting. This meeting occurs after the feedback report is received from the KSU Office of Assessment. The review will determine if the results are still valid and methods for improvement.
	Assess contemporary issues.	AVT 445 Aviation Law	Appealed Cases	This will be reviewed yearly at the assessment meeting. This meeting occurs after the feedback report is received from the KSU Office of Assessment. The review will determine if the results are still valid and methods for improvement.
5. Appraise unsafe operational conditions within the aviation environment. (Critical thinking)	Use the techniques, skills, and modern technology necessary for professional practice.	AVT 450	SMS Project – Creating a SMS for a specific operation	This will be reviewed yearly at the assessment meeting. This meeting occurs after the feedback report is received from the KSU Office of Assessment. The review will determine if the results are still valid and methods for improvement.
6. Demonstrate effective oral and written communication skills. (Communication)	Communicate effectively, using both written and oral communication skills.	AVT 445 Aviation Law	Research paper (written)	This will be reviewed yearly at the assessment meeting. This meeting occurs after the feedback report is received from the KSU Office of Assessment. The review will determine if the results are still valid and methods for improvement.
		AVT 497 Senior Capstone	Research presentation (oral)	
7. Creatively solve technical problems related to the aviation workplace using math and science. (Critical thinking)	Apply mathematics, science, and applied sciences to aviation related disciplines.	COT 405	Problem Solving Project	This will be reviewed yearly at the assessment meeting. This meeting occurs after the feedback report is received from the KSU Office of Assessment. The review will determine if the results are still valid and methods for improvement.
	Analyze and interpret data.			

STUDENT LEARNING OUTCOMES

1. Demonstrate the ability to work on diverse multi-disciplinary teams. (**Diversity**)
2. Demonstrate a global perspective on aviation industry practices. (**Knowledge**)
3. Choose ethical courses of action within the operational environment. (**Professional integrity**)
4. Demonstrate a lifelong commitment to personal excellence through service and continuing education. (**Knowledge**)
5. Appraise unsafe operational conditions within the aviation environment. (**Critical thinking**)
6. Demonstrate effective oral and written communication skills. (**Communication**)
7. Creatively solve technical problems related to the aviation workplace using math and science. (**Critical thinking**)

Technology & Aviation

Aviation Electronics Technology Certificate

Contact person(s) for this proposal: Steven Locklear

Rationale: We added basic aircraft electricity in addition to Basic electronics was because both courses give a good foundation for electricity and the course descriptions were similar.

The removal of AVT 315 Advanced Avionics and addition of AVM 370 Advanced Aircraft Avionics and Instruments is based on the number of students taking the courses and the similarity of the two courses based on the course descriptions. Any students that take AVT 315 that returns and wants to substitute will be allowed to should they desire to pursue the avionics certificate.

AVT 330 Avionics troubleshooting was removed from the list because of integrating troubleshooting skills in the entire curriculum.

These revisions reduce the credit hours for getting the avionics certificate from 20 hours to 16 hours. This reduction in credit hours makes getting the avionics certificate faster and more efficient for our students. Also using the A&P seeking students as a source for avionics students will make the avionics certificate attractive to our students.

We left the options open for non-aviation maintenance students to pursue an avionics certificate for any AVT or UAS students to pursue an avionics certificate. This should improve and increase our enrollment to our avionics program.

Impact (i.e. if this impacts another unit): No impact listed.

<p>CURRENT: Aviation Electronics Technology Certificate (20 credit hours)</p> <p>Required Core Courses (13 hours)</p> <p>AVM 305 Introduction to Aircraft Avionics and Instruments** 3</p> <p>AVT 315 Advanced Avionics.....3</p> <p>AVT 327 Avionics Repair 3</p> <p>ECET 100 Basic Electronics*.....4</p> <p>Elective Courses (7 hours): Choose two:</p> <p>AVT 330 Avionics Troubleshooting.....4</p> <p>AVT 429 Avionics Maintenance 3</p> <p>AVT 430 Advanced Avionics Installation 4</p> <p>*Students with an FAA Airframe (A) Certificate may test out of this course. **Students with an FAA Airframe (A) Certificate or an FAA Private Pilot Certification may test out of this course.</p>	<p>PROPOSED: Aviation Electronics Technology Certificate (<u>16</u> credit hours)</p> <p>Required Core Courses (13 hours)</p> <p><u>AVM 111 Basic Aircraft Electricity 4</u></p> <p>or</p> <p><u>ECET 100 Basic Electronics*..... 4</u></p> <p>AVM 305 Introduction to Aircraft Avionics and Instruments** 3</p> <p><u>AVM 370 Advanced Aircraft Avionics and Instrument Systems..... 3</u></p> <p>AVT 327 Avionics Repair 3</p> <p>Elective Courses (<u>3</u> hours): Choose <u>one</u>:</p> <p>AVT 429 Avionics Maintenance 3</p> <p>AVT 430 Advanced Avionics Installation <u>3</u></p> <p>*Students with an FAA Airframe (A) Certificate may test out of this course. **Students with an FAA Airframe (A) Certificate or an FAA Private Pilot Certification may test out of this course.</p>
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