



## AVIATION SCIENCE BACHELOR OF SCIENCE DEGREE PROGRAM

### CURRICULUM GUIDE

<b>I.</b>	<b><u>General Education Courses</u></b>	<b><u>41 Credits</u></b>
	<b>Curriculum Area I</b>	<b>9 Credits</b>
	ENGL 203 Fundamentals of Contemporary Speech	3
	Arts and Humanities Course as approved by the University	3
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	<b>Curriculum Area II</b>	<b>6 Credits</b>
	Elective Social Sciences course (SOC1 101, POLI 200, ECON 201, ECON 202)	3
	Elective Behavioral Sciences course (PSYC 200, CRJS 101, SOCI 201)	3
	<b>Curriculum Area III</b>	<b>7 Credits</b>
	<u>Students must select two science courses, one of which must include a laboratory</u>	
	<b>Curriculum Area IV</b>	<b>6 Credits</b>
	<u>Students must take 6 credits of math, with at least one course at or above the level of MATH 109</u>	
	Aviation Electronics and Aviation Software students are advised to take MATH 112 and one other Math course to fulfill Curriculum Area IV requirements.	
	<b>Curriculum Area V</b>	<b>9 Credits</b>
	ENGL 101 Basic Composition I	3
	ENGL 102 Basic Composition II	3
	ENGL 305 Technical Writing <b>or</b>	
	ENGL 310 Advanced Composition	3
	<b>Curriculum Area VI</b>	<b>4 Credits</b>
	AVSC 100 First Year Orientation with Aviation	1
	EXSC 111 Personalized Health Fitness <b>or</b>	
	AVSC XXX Aviation Course as approved by Department	3
<b>II.</b>	<b><u>Support Requirements</u></b>	<b><u>6 Credits</u></b>
	<i>Students will take one Supportive Math course and one Supportive Computing course</i>	
	AVSC 390 Aviation Applications of Statistics and Research Design <b>or</b>	3
	BUAD 252 Calculus w/ Business & Management Applications <b>or</b>	3
	MATH 210 Elementary Statistics	3
	AVSC 170 Software and Simulation Applications in Aviation <b>or</b>	3
	ENGE 170 Programming Concepts for Engineers <b>or</b>	3
	BUED 212 Computer Concepts/Applications I	3

Aviation Electronics and Aviation Software Students will take MATH 211 to fulfill Supportive Math Requirements.

**III. Aviation Core Requirements****34 Credits**

AVSC 112	Aviation Fundamentals	3
AVSC 131	Air Transportation	3
AVSC 152	Meteorology & Environmental Issues	3
AVSC 201	The National Airspace System	3
AVSC 202	Air Traffic Control	3
AVSC 231	Airline Management I	3
AVSC 241	Aviation Safety	3
AVSC 305	Aviation Career Preparation	1
AVSC 331	Aviation Law	3
AVSC 421	Aviation Psychology	3
AVSC 441	Human Factors in Aviation	3
AVSC 490	Senior Capstone in Aviation	3

**IV. Concentration Requirements****33 Credits****Professional Pilot Concentration**

AVSC 141	Private Pilot Ground Lab	1	AVSC 253	Commercial Pilot Flight II	3
AVSC 143	Private Flight I	1	AVSC 254	Commercial Pilot Flight III	2
AVSC 153	Private Flight II	2	AVSC 302	Advanced Aircraft Systems	3
AVSC 163	Instrument Rating Flight	3	AVSC 311	Aerodynamics and Aircraft Per.	3
AVSC 161	Instrument Rating Ground	3	AVSC 342	Flight Physiology	3
AVSC 251	Commercial Pilot Ground	3	AVSC 451	Certified Flight Inst. Airplane – Grnd.	3
AVSC 252	Commercial Pilot Flight I	2	AVSC 452	Certified Flight Inst. Airplane – Ft. <u>or</u>	1
			AVSC 472	Multi-Engine Pilot Flight	1

**Aviation Management Concentration**

AVSC 132	Introduction to Aviation Business	3	AVSC 261	Aviation Organization and Leadership	3
ACCT 201	Introductory Financial Accounting	3	AVSC 355	Airport Planning	3
ACCT 202	Introductory Corp. & Mang. Acct.	3	AVSC 431	Maintenance Management	3
ECON 201	Principles of Economics I	3	AVSC 432	Airline Management II	3
ECON 202	Principles of Economics II	3	AVSC 442	Safety Management	3
AVSC 232	Airport Management	3			

**Aviation Electronics Concentration**

AVSC 302	Advanced Aircraft Systems	3	EDTE 240	Communication Electronics	3
EDTE 105	Electrical Circuit Technology I	3	ETEE 303	Circuit Theory III	3
EDTE 202	Electronics	3	ETEE 335	Logic and Switching	3
EDTE 205	Electrical Circuit Technology II	3	ETEE 355	Advanced Electronics	3
EDTE 210	Electronic Troubleshooting Lab	3	ETEE 425	Communication and Microwave Tech	3
EDTE 215	Electronics II	3			

**Aviation Software Concentration**

CSDP 221	Intro to Computer Prog: Intensive	4	AVSC 380	Cooperative or Internship	1
CSDP 222	Advanced Programming	4	CSDP 401	Operating Systems	3
CSDP 250	Data Structures	3	AVSC 442	Safety Management	3
CSDP 301	Computer Org. and Assembly Lang.	3	CSDP 351	Computer Architecture <u>or</u>	3
AVSC 302	Advanced Aircraft Systems	3	CSDP 404	Database Management Sys <u>or</u>	3
CSDP 305	Software Engineering I	3	CSDP 405	Software Engineering II	3
AVSC 311	Aerodynamics and Aircraft Per.	3			

**V. Electives\*****6 Credits**

*Students will choose AVSC or other courses to complete at least 6 credits.*

*\*Elective courses cannot be an AVSC course that is required elsewhere in the curriculum.*