



# UNIVERSITY OF MARYLAND EASTERN SHORE

## AVIATION SCIENCE BACHELOR OF SCIENCE DEGREE PROGRAM

### DEPARTMENTAL REQUIREMENTS

The Aviation Sciences program consists of 120 total credit hours. Students complete 34 credit hours of Aviation core courses and choose one of four concentrations. The concentration areas are Professional Pilot, Aviation Electronics and Aviation Management and each consists of 33 credit hours. The curricula include 41 credit hours of general education courses, 6 credit hours of support courses, and 6 hours of Aviation elective courses.

### 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	3
	(SOCL 101, POLI 200, ECON 201, ECON 202)	
	Elective Behavioral Sciences course	3
	(PSYC 100, CRJS 101, SOCL 201)	
	<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
	MATH 210 Elementary Statistics	3
	AVSC 170 Software and Simulation Applications in Aviation <b>or</b>	3
	BUED 212 Computer Concepts/Applications I	3

**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 – Flt. <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				

**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.*