

## CURRICULUM GUIDE

### AVIATION SCIENCE PROGRAM

#### Total number of credits and their distribution

	<u>Category</u>	<u>Distribution</u>
I.	General Education Courses	41 credit hours
II.	Support Requirements	6 credit hours
III.	Aviation Core Requirements	34 credit hours
IV.	Concentration Requirements	33 credit hours
V.	Electives	6 credit hours

#### List of courses by title and level

<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
	(SOC 101, POLI 200, ECON 201, ECON 202)	
	Elective Behavioral Sciences course	3
	(PSYC 200, CRJS 101, SOCI 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
	EDHE 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>
	BUAD 252 Calculus w/ Business & Management Applications	3
	BUED 212 Computer Concepts/Applications I	3
	<i>Aviation Electronics and Aviation Software Students will take MATH 211 in place of BUAD 252 to fulfill Support Requirements.</i>	

**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	Special Topics in Aviation	3

**IV. Concentration Requirements 33 Credits**

**Professional Pilot Concentration**

AVSC 141	Private Pilot Ground Lab	1	AVSC 254	Commercial Pilot Flight III	2
AVSC 143	Primary Flight Training I	2	AVSC 302	Advanced Aircraft Systems	3
AVSC 153	Primary Flight Training II	2	AVSC 311	Aerodynamics and Aircraft Per.	3
AVSC 163	Primary Flight Training III	2	AVSC 342	Flight Physiology	3
AVSC 161	Instrument Rating Ground	3	AVSC 451	Certified Flight Inst. Airplane – Grnd.	3
AVSC 251	Commercial Pilot Ground	3	AVSC 452	Certified Flight Inst. Airplane – Flt. <u>or</u>	2
AVSC 252	Commercial Pilot Flight I	2	AVSC 472	Multi-Engine Pilot Flight <u>and</u>	1
AVSC 253	Commercial Pilot Flight II	2	AVSC 380	Cooperative or Internship	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	ETEE 355	Advanced Electronics	3
AVSC 361	Communication Electronics	3	ETEE 421	Instruments and Measurement	4
EDTE 211	Electrical & Electronic Technology I	3	ETEE 425	Communications and Microwave Tech.	3
EDTE 212	Electrical & Electronic Technology II	3	ETEE 485	Design Technology I	3
ETEE 303	Circuit Theory III	3	ETEE 486	Design Technology II	3
ETEE 335	Logic and Switching	3			

**Aviation Software Concentration**

AVSC 302	Advanced Aircraft Systems	3	CSDP 301	Machine and Assembly Language	3
CSDP 220	Introduction to Computer Prog.	4	CSDP 305	Software Engineering I	3
CSDP 221	Intro to Computer Prog.: Intensive	4	CSDP 321	Introduction to Discrete Structures	3
CSDP 222	Advanced Programming	4	CSDP 350	Linear Programming	3
CSDP 250	Introduction to Data Structures	3	CSDP 401	Operating Systems	3

**V. Electives 6 Credits**

*Students will choose AVSC or other courses approved by the department to complete at least 6 credits. Students pursuing a career in Air Traffic Control must select 6 credits of AVSC Air Traffic Control Operations Coursework.*