



Center for Individualized Learning
Aerospace Communications and Media Production Extended Major

This major is an incubator through the Individualized Degree Program (IDP), and is not yet a permanent major. It is designed for students that desire a career in aerospace corporate or governmental communications, corporate/governmental relations, media production, etc. Airports around the world have a significant demand for these types of employees, and aerospace is quickly gaining ground in similar needs.

The Aerospace industry needs graduates who can design and disseminate technical info and knowledge to users that might not have the skills or understanding necessary to grasp the complexities of the industry. For example, those working in this field might explain the complex to end users through highly usable forms of communication and related technologies.

The Aviation industry, especially the plethora of airports worldwide, needs technical communication, social media, and public relations experts. Communication strategies and social media are now of prime concern to airport authorities and operators.

The burgeoning field of Unmanned Aerial Systems/UAS/UAV needs technical communication specialists who can take data or info retrieved from remote sensing and make – wait for it – products or services out of that content.

This extended major requires a completed and approved IDP proposal.

GRADUATION REQUIREMENTS

Recommended General Studies coursework

All students must complete the standard General Studies requirements for their catalog year. Students are welcome to choose the General Studies courses of interest in each category.

Written Communication	6 credits
Oral Communication	3 credits
Quantitative Reasoning	3 credits
Arts and Humanities	6 credits
Historical	3 credits
Natural and Physical Sciences	6 credits
Social and Behavioral Sciences I	3 credits
Social and Behavioral Sciences II	3 credits
Global Diversity	<u>0-3 credits</u>
Total	33 credits (minimum required)

Note that the Global Diversity course can also satisfy any of the other General Studies categories.



Degree/Graduation Requirements

Multicultural Course:	3 credits
Senior Experience:	3 credits
Appropriate capstone course to be chosen with faculty advisor or department chair. Options include an internship, a research experience, or an AES/JMP combined capstone to be created later (independent study or regular course).	
Upper-division hours:	40 credits
All MSU Denver students must complete at least 40 credit hours at the 3000-4000 level.	

Highly Recommended Coursework

Communication and Media Production Courses (all are strongly recommended)

JMP 1450 - Literacy and Communication Technologies	3 credits
JMP 2430 - Introduction to Media Production	3 credits
JMP 2450 - Basic Interactive Production	3 credits
JMP 2610 - Introduction to Technical Writing	3 credits
JMP 390A - Action Video (new course)	3 credits
JMP 3540 - Mobile and Social Media Communication	3 credits
JMP 3780 - Communication Law	3 credits
JMP 2460 - Raster Graphics	3 credits
Or JMP 2465 Vector Graphics	
JMP 3310 - International Technical Communications	3 credits
Or JMP 2700 Fundamentals of Public Relations	
JMP 2480 - Intro to Computer Animation	3 credits
Or JMP 3330 - Technical Writing for Translation (JMP 2610)	
Or JMP 3700 Public Relations Writing	
JMP 3450 - Intermediate Interactive Production	3 credits
Or JMP 3620 - Technical Editing	
Or JMP 3630 - Designing Digital Documents	
JMP 3625 – Usability Testing	3 credits
Or JMP 4740 Public Relations Lab	

Total COM/JMP coursework 36 credit hours



Aerospace Courses:

Complete the following pre-requisite courses and choose one area of emphasis in AES (**all prerequisites and courses for one emphasis area strongly recommended**).

AES Prerequisite Courses:

AES 1050 - Intro to Space 3 credits

Choose 1 of the following: 3 credits

AES 2050 - Aviation and Aerospace History and Development

Or AES 2607 - Intro to Aerospace Systems Simulations

(Note AES 2607 needed for Space Commercialization emphasis.)

Choose one emphasis area, below.

Emphasis 1: Airport Management (leading to certificate in Airport Management)

AES 3220 - Aviation Law & Risk Management (AES 1100) 3 credits

Or AES 3230 - Airline Management

Or AES 3240 - Airline Planning

AES 3880 - Aviation Security 3 credits

AES 4200 - Airport Planning & Management I 3 credits

AES 4210 - Airport Planning & Management II (pre-req AES 4200) 3 credits

AES 4230 - General & Business Aviation Ops. 3 credits

AES 4870 - Aviation Safety Prog. Management (pre-req all AES above) 3 credits

(Note: JMP 3540 - Mobile and Social Media is strongly suggested for this emphasis.)

Emphasis 2: Unmanned Aerial Systems/UAS (leading to certificate in UAS)

AES 1040 - Introduction to Unmanned Aircraft Systems 3 credits

AES 2040 - Unmanned Aircraft Systems Flight and Control 3 credits

AES 3040 - Unmanned Aircraft Systems Data Collections and Analysis (3 credits

AES 3980 - Internship in Aviation and Aerospace Science (3 - 6) 3 credits

Or approved AES course substitution for AES 3980 (3)

AES upper-division Elective 3 credits

(Note: FAA Part 107 Remote Pilot Certificate required for UAS certificate.)



Emphasis 3: Space Commercialization (leading to certificate in Space Commercialization)

AES 3600 - Space Flight Operations I (pre-req JR standing)	3 credits
AES 4601 - Space Flight Operations II (AES 3600)	3 credits
AES 4602 - Aerospace Commercialized Ops. (AES 4601)	3 credits
AES 4603 - Aerospace Ops. Systems Analysis & Design (AES 4601)	3 credits
AES 4607 - Orbital Mechanics & Aerospace Sys. Simulations (AES 2607)	
Or approved AES course substitution in place of AES 4607	3 credits

(Note: MTH 1110 and either AST 1040 Or PHY 2010 required for certificate.)

Emphasis 4: General AES focus (no certificate earned)

Any AES courses listed above (with necessary pre-requisites),
including at least 9 upper-division 15 credits

Total AES coursework 21-24 credit hours

Senior Experience:

3 credits

Appropriate capstone course to be chosen with faculty advisor or department chair.
Options include an internship, a research experience, or an AES/JMP combined capstone to be created later (independent study or regular course).

Total recommended credit hours for major:

60-63 credit hours

Overall degree requirements:

General Studies	33 credit hours
Major	60-63 credit hours
Electives or optional minor	<u>as needed</u>

**Total hours for B.S. degree 120 credit hours
(must include 40 upper-division hours)**

Note that student can choose to complete the coursework for a second AES certificate using optional elective credit hours.

Faculty Liaisons:

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