

*Human Factors Psychology/
Master of Human Factors and Systems*

Bachelor of Science in Human Factors Psychology /
Master of Human Factors and Systems

In conjunction with the Bachelor of Science in Human Factors Psychology and the traditional master's degree in Human Factors and Systems, the Department of Human Factors and Systems also offers a five-year master's degree program in Human Factors and Systems. The five-year master's program offers upper-level undergraduates in the major the chance to begin their graduate work while completing their bachelor's degree program.

The program is open to all undergraduate Human Factors students who meet eligibility requirements that include a CGPA of 3.20 and junior-year standing.

Student applications will be reviewed for the program, and students accepted into the five-year master's program will be notified of such at the end of their junior year. During their senior undergraduate year, they will take HFS 500 and one additional graduate course (six credits) that will fulfill requirements for both the bachelor's and the master's degree program. Five-year master's students are required to complete 30 credits of graduate work to complete the degree program. Both the Bachelor of Science degree in Human Factors Psychology and the Master of Human Factors and Systems degree will be awarded when the student completes the master's degree program.

General Education

Course*	Credits
Communication Theory and Skills.....	9
Mathematics.....	6
Computer Science.....	3
Physical and Life Sciences (one course must include a laboratory)	6
Lower-Level Humanities.....	3
Lower-Level Social Sciences	6
HU/SS 300-400 Level.....	3
Total Credits	36

Embry-Riddle courses in general education may be chosen from those listed below, assuming prerequisites are met. Courses from other institutions are acceptable if they fall into these broad categories.

Communication Theory and Skills
COM 122, 219, 221, 222, 351, 360, 364, 410, 411, 412
HU 143, 319, 351, 355, 361, 362, 363, 370, 375, 420

Mathematics
MA 111, 112, 140, 142, 145, 222, 241, 242, 243

Computer Science
IT 109, CS 118, BA 120

Physical and Life Sciences
PS 101-109, 142, 302, 304, 308, 309

Humanities
LOWER-LEVEL:
HU 140s series, 250
UPPER-LEVEL:
HU 300-315, 320-345

Social Sciences
LOWER-LEVEL:
PSY 101 (required) and 3 credits from the following: EC 200-211, SS 110-130, 204, 210
UPPER-LEVEL:
SS 302-361

Academic Programs at the Daytona Beach Campus

Core Requirements**

College Success	
UNIV 101	1
Advanced Communication	
For the Advanced Communication requirement, Human Factors majors are required to take one Advanced Communication class for a total of three credits. This exists in addition to the nine credits (three classes) taken for the Communication General Education Requirement.	
COM 360, 364, 410, 411, 415, 460	
HU 361, 362, 363, 375, 415, 420	

Total Credits 3

Computer Science

Six credit hours from CS courses listed below. These courses are in addition to those taken as General Education.

CEC 220, 222	
CS 118, 125, 223	
IT All courses in the curriculum may be used	
SE 300	

Total Credits 6

Psychology and Human Factors

Course	Title	Credits
HF 300	Human Factors I: Principles and Fundamentals	3
HF 302	Human Factors II: Analytic Methods and Techniques	4
HF 305	Human Factors III: Test and Evaluation ..	4
HF 400	Human Factors IV: System Design	4
PSY 312	Research Analysis in Psychology	4
PSY 322	Research Design	4
PSY 310	Sensation and Perception	3
PSY 315	Cognitive Psychology	3
PSY 335	Physiological Psychology	3
HF 310	Human Computer Interaction	3
HF 312	Ergonomics and Bioengineering	3
HF 412	Simulating Humans in Complex Systems	3

Total Credits 41

Aviation

Course	Title	Credits
AS 120	Principles of Aeronautical Science -OR-	
SP 110	Introduction to Space Flight -OR-	
FAA	Private Pilot Certificate -OR-	
WX 201	Meteorology I	3

Total Credits 3

Practicum

Course	Title	Credits
HF 490	Practicum in Human Factors Psychology	3

Total Core Credits 57

Specified Electives

Take two courses from each of the following two groups of courses and any one additional course from either group (15 credit hours total).

Group I: Applied Systems in Human Factors

Course	Title	Credits
HF 315	Automation and Systems Issues in Aviation	3
HF 325	Human Factors and System Safety	3
HF 326	Human Performance in Extreme Environments	3
HF 330	Human Factors in Space	3
HF 335	Human Factors in Air Traffic Control	3
HF 340	Human Factors and Product Liability	3
HF 410	Human Factors in Crew Station Design	3
HF 415	Human Factors in Simulation Systems	3
HF 422	Applied Ergonomic Design, Analysis, and Evaluation	3

Group II: Psychological Foundations of Human Factors

Course	Title	Credits
PSY 320	Aviation Psychology	3
PSY 340	Industrial-Organizational Psychology	3
PSY 345	Training and Development	3
PSY 350	Social Psychology	3
PSY 400	Introduction to Cognitive Science	3

(Other courses with approval of advisor.)

Total Specified Undergraduate Elective Credits 15

Open Elective Credits 12

Total Elective Credits 27

UNDERGRADUATE SENIOR YEAR

Course	Title	Credits
HFS 500	Systems Concepts (Fall)	3
	One Additional Graduate Course (Spring)	3

Total Credits at End of Senior Year 126

Academic Programs at the Daytona Beach Campus

GRADUATE-LEVEL STUDIES

Two graduate-level HFS courses are taken in the senior year as described above. Twenty-seven credits remain.

Course Title	Credits
HFS 510 Research Design and Analysis I	3
HFS 610 Research Design and Analysis II	3
HFS 615 Sensation and Perception	3
HFS 700 Thesis	6
HFS Graduate Elective***	12
Total Credits	27

TOTAL DEGREE CREDITS **153**

Suggested Program of Study

Students should be aware that several courses in each academic year may have prerequisites and/or corequisites. Check the course descriptions at the back of this catalog before registering for classes to ensure requisite sequencing.

FRESHMAN YEAR

Course Title	Credits
Communication Theory and Skills*	6
Computer Science*	3
Lower-Level Humanities*	3
Mathematics*	6
Physical and Life Sciences*	3
HF 300 Human Factors I: Principles and Fundamentals	3
HU/PSY/SS 300-400 level*	3
PSY 101 Intro to Psychology*	3
UNIV101 College Success	1
Total Credits	31

SOPHOMORE YEAR

Course Title	Credits
Communication Theory and Skills*	3
Lower-Level Social Sciences*	3
Physical and Life Sciences*	3
Computer Science**	3
HF 302 Human Factors II: Analytic Methods and Techniques	4
HU Advanced Communication**	3
PSY 312 Research Analysis in Psychology	4
PSY 335 Physiological Psychology	3
AS 120 Principles of Aeronautical Science -OR-	
SP 110 Introduction to Space Flight -OR-	
FAA Private Pilot Certificate -OR-	
WX 201 Meteorology I**	3
Total Credits	29

JUNIOR YEAR

Course Title	Credits
Computer Science**	3
HF 305 Human Factors III: Test and Evaluation	4
HF/PSY Specified Electives	9
PSY 305 Research Design	4
PSY 310 Sensation and Perception	3
PSY 315 Cognitive Psychology	3
HF 312 Ergonomics and Biomechanics	3
Open Electives	3
Total Credits	32

SUMMER TERM

Course Title	Credits
HF 490 Practicum in Human Factors Technology	3

Students must spend the term performing a co-op engaged in a human factors engineering activity (analysis, design, or test).

SENIOR YEAR

Course Title	Credits
HF 310 Human Computer Interaction	3
HF 412 Simulating Humans in Complex Systems	3
HF 400 Human Factors IV: System Design	4
HFS 500 Systems Concepts	3
HFS 620 Memory and Cognition	3
HF/PSY Specified Electives	6
Open Electives	9
Total Credits	31

GRADUATE-LEVEL STUDIES

Course Title	Credits
HFS 510 Research Design and Analysis I	3
HFS 610 Research Design and Analysis II	3
HFS 615 Sensation and Perception	3
HFS 700 Thesis	6
HFS Graduate Elective***	12
Total Credits	27

TOTAL DEGREE CREDITS **153**

* General Education Requirement

** Degree Core Requirement

*** Please refer to the graduate section of this catalog for a listing of available graduate-level electives.

‡ All Psychology and Human Factors courses must be passed with a "C" or better to count toward degree completion.