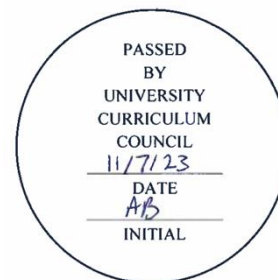


University Curriculum Council
Approved Programs
November 7, 2023



PROGRAM CHANGES

1. College of Arts & Sciences

Program Code: BS3106

Program Name: Mathematical Statistics

Department/School: Mathematics

Contact: Yaqin Feng, fengy@ohio.edu

Desired Start Date: Fall 2024

We are adding ET 2100 Engineering Programming and MATH 2530 Foundations of Data Science to the list of required courses for the major. The purpose of this change is to give our majors experience in programming and exposure to data science, which is fast becoming a major use of statistics. Our recently graduated students have indicated a need for both of these.

We are dropping Applied Statistics Group A in favor of just requiring MATH 2500. Most of our students take MATH 2500 anyway and we can make substitutions for the few students who do other introductory statistics courses as needed.

We are changing the name "Applied Statistics Electives -Group B" to just "Applied Statistics Electives".

We are adding several courses to the list of "Applied Statistics Electives":

ECON 2200 Introduction to Economic Data Analysis Using Python (3 credit hours)

ECON 2890 Economic Data Analysis with Excel and SAS (3 credit hours)

ECON 3070 - Economic Data Analysis (3 credit hours)

QBA 3720 - Predictive Analytics (3 credit hours)

QBA 4720 - Prescriptive Analytics (3 credit hours)

MATH 4580 - Elements of Financial Mathematics (3 credit hours)

MATH 4590 - Short Term Actuarial Models (3 credit hours)

This change increases total program hours by 8 credits.

2. College of Health Sciences & Professions

Program Code: CTAPSU

Program Name: Appalachian Studies Certificate

Department/School: Social and Public Health

Contact: Tiffany Arnold arnoldt2@ohio.edu

Desired Start Date: Spring 2024

We request two changes to this certificate. First, we would like to reduce the total number of credit hours from 19 to 15. Second, we would like to make changes to core requirements and eliminate the multiple "select from" categories for courses (environment, history, society and culture, health, integrating themes). The revised certificate will maintain one core requirement, a community engagement course, and three courses from a variety of areas.

Current requirements	Proposed requirements	Comments
Core Requirement 1: HLTH 2230 Introduction to Appalachian Studies (3)	Core Requirement 1: HLTH 2230 Introduction to Appalachian Studies (3)	
Core Requirement 2: <i>Choose 2</i> EH 3040 Environmental Health in Appalachia (3) Geog 3330 Appalachia Land and People (3) Pols 3060 Politics of Appalachia (3) Soc 3090 Sociology of Appalachia (3)	Community Engagement: HLTH 3150C Community engagement in Appalachian Health (3) or another approved C course	C course taken to fulfill the community engagement requirement cannot also count toward the three electives.
Complete one course from the following: <i>Environment:</i> Bios 2200 Conservation and Biodiversity (3) Geog 3330 Appalachia Land and People (3) Geog 4470 Natural Resource Conservation (3) Jour 4150 Environmental Science Journalism (3) Pbio2480 Dendrology (3) Pbio 3100 Biology of Fungi (3) Pbio 3190 Ohio Flora (3) Rec 3550 Principles of Ecotourism (3) <i>History:</i> CE3120 Original Ohio Land Subdivisions (2) Hist 3018 History of the American South to 1900 (3) Hist 3170 Survey of Ohio History (3) Pols 3060 Politics of Appalachia (3) Health: EH 3040 Environmental Health in Appalachia (3) Geog 3410 Geography of Hunger and Food insecurity (3) Hlth 2030 Foundations in Health Education (3) Nutr 4000 Nutrition in the Community (3) Pbio3030 Medicinal Plants of Ohio (2) SW3273 Mental Health and Social Work (3) <i>Integrating Themes:</i>	Select 3 from the following: EH 3040 Environmental Health in Appalachia (3) Geog 3330 Appalachia Land and People (3) Pols 3060 Politics of Appalachia (3) Soc 3090 and 3090C Sociology of Appalachia (3) JOUR 4150 Environmental Science and Journalism (3) Pbio 3190 Ohio Flora (3) REC 3550 Principles of Ecotourism (3) Hist 3170 Survey of Ohio History (3) Econ 3010C Economics of Altruism (3) Econ 3120 C Economics of Poverty (3) Ling 2800 Language in America (3) Soc 3300 Sociology of Poverty (3) Geog 3410 Geography of Hunger and Food Insecurity (3) HLTH 2030 Foundations in Health Education (3) HLTH 4800 Applied Service Learning in Rural Community Health (3) EH 4010 Climate Change and Public Health (3) EH 4710 Environmental Risks and Society Benefits (3)	

HLTH 4800 Applied Service Learning in Rural Community Health (3) Mus 4620 Music in the Multicultural United States (3) T3 4010 Climate change and public health (3) T3 4081 Landscape and culture (3) T34400 Seminar in Wealth and Poverty (3) T3 4414 The True Value of Food (3) T3 4605 Appalachian culture, Energy and Environment (3) T3 4730 Childhood in America and its Historical and Sociocultural Impact on the Society in which we live (3) Community Engagement: HLTH 2900 Special Topics in Health or another C course		
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NEW PROGRAMS/CERTIFICATES

1. Russ College of Engineering and Technology

Program Code: BSXX33

Program Name: Artificial Intelligence

Department/School: School of Electrical Engineering and Computer Science

Contact: Avinash Karanth (karanth@ohio.edu)

The undergraduate program in Artificial Intelligence (AI) trains students in artificial intelligence theory and algorithms for learning, data analysis, optimization and decision making that can be applied to various domains. Students receive in-depth training and knowledge to transform large amounts of data into actionable decisions for complex inputs such as vision, language and databases. The curriculum includes artificial intelligence topics such as knowledge representation, heuristic search, automated problem solving, decision making, machine learning, deep learning, and appropriate computer science, electrical engineering and computer engineering topics. Successful students should be prepared to enter the workforce as practicing AI engineers. This program is designed to satisfy the ABET criteria Computing Accreditation Commission for Computer Science or related programs.

Programs in artificial intelligence were directly called out as an interest area in the new program solicitation called Program Innovation Accelerator (PIA). This program was approved for the Program Innovation Accelerator (PIA) program from the Provost.

Students in this program complete fifteen (15) hours of General Education requirements not covered by the major, one course in psychology (PSY 1010), one half (0.5) hour of College Level requirements, six (6) hours of courses that covers ethics and society, thirty (30) hours of mathematics and basic science, twenty four (24) hours of a core of computer science courses, seven (7) hours of core electrical engineering courses, twelve (12) hours of core artificial intelligence (AI) related courses, six (6) hours of an AI capstone sequence, and twelve (12) hours of technical electives. The attached table provides the given requirements.

Course Prefix	Course Number	Course Title	Gen Ed Category	Tot. credit hours
General Education				
Foundations	Written Comm.		FWC	3
Foundations	Advanced Writing		FAW	3
Foundations	Quantative Reasoning*		FQR	
Foundations	Intercultural Explorations		FIE	3
Pillars	Texts and Contexts		PHTC	3
Pillars	Natural Science*		PNS	
Pillars	Humanities: Arts		PHA	3
Pillars	Social or Behav. Sciences		PSBS	
Arches	Constructed World*		ACSW	
Arches	Natural World*		ANW	
Arches	Connected World*		ACNW	
Sub-Total				15
College Requirements				
ET	1500	Career Orientation		0.5
Sub-Total				0.5
Ethics and Society				
CS	2653	Professional/Ethical Computing	BER, BDP	3
ET	2905	History of Tech. in Society	ACNW	3
Sub-Total				6
Psychology				
PSY	1010	General Psychology	PSBS	3
Mathematics and Science				
MATH	2301	Calculus I	ACSW	4
MATH	2302	Calculus II	FQR	4
MATH	3200	Applied Linear Algebra		3
CS	3000	Intro to Discrete Structures		4
EE	3713	Applied Prob & Stat. for EE		3
Phys/Chem		Lab Sequence I ^[1]		4
Phys/Chem		Lab Sequence II ^[2]	ANW	4
BIOS	1700/1705	Biological Sciences I: Molecules and Cells	PNS	4
Sub-Total				30
Computing Core				
CS	2400	Intro to Computer Science I		4
CS	2401	Intro to Computer Science II		4
CS	3200	Programming Languages		3
CS	3560	Software Engineering Tools		3
CS	3610	Data Structures		4

CS	4000	Intro to Distrubuted, Parallel, and Web-Centric Computing		3
CS	4040	Design and Analysis of Algorithms		3
Sub-Total				24
Electrical Engineering Core				
EE	1024	Intro to Computer Eng.		4
EE	3613	Computer Organization		3
Sub-Total				7
AI Core				
AI	2100	Concepts of Artificial Intelligence (new)		3
AI	3100	Foundations of Artificial Intelligence (new)		3
AI	3300	Statistical Learning (new)		3
AI	4010	Foundations of Learning (new)		3
Sub-Total				12
AI Capstone				
AI	4560	Capstone Design I	BSL,BDL	3
AI	4561	Capstone Design II	BSL,BDL, Capstone	3
Sub-total				6
Technical Elective				
N/A	N/A	Tech Elective #1		3
N/A	N/A	Tech Elective #2		3
N/A	N/A	Tech Elective #3		3
N/A	N/A	Tech Elective #4		3
Sub-Total				12

Under the technical elective requirements, students select four (4) technical electives from the following list:

- CS 4150: Data Science
- CS 4160: Bioinformatics Tools
- CS 4170: Data Mining
- EE 3954: Microprocessors/Microcontrollers
- CS 4420: Operating Systems
- CS 4830: Machine Learning
- Any AI 4xxx course excluding AI 4900

A total of 120 credit hours are required and this is reflected in the model curriculum/course plan. This total assumes that students take a three credit Intercultural Explorations course (FIE) as part of their general education requirement. In principle, only two hours are required for that general education category. However, there are no two-hour FIE courses available at this point.

2. Russ College of Engineering and Technology

Program Code: BSXX32

Program Name: Cybersecurity Engineering

Department/School: School of Electrical Engineering and Computer Science

Contact: Avinash Karanth (karanth@ohio.edu)

The undergraduate program in Cyber Security Engineering trains students to be practicing cyber security engineers. Students receive training in cyber security related topics that include hardware security, software security, along with appropriate electrical engineering, computer science, and security engineering topics. Successful students should be prepared to enter the workforce as practicing cybersecurity engineers. This program is designed to satisfy the ABET criteria Engineering Accreditation Commission for Cyber Security Engineering or related programs.

Cybersecurity research and education has been identified as a national need and priority area by a variety of agencies, including the National Science Foundation. At Ohio University, programs in cybersecurity were directly called out as an interest area in the new program solicitation called Program Innovation Accelerator (PIA). This program was approved for the Program Innovation Accelerator (PIA) program from the Provost.

Students in this program complete eighteen (18) hours of General Education requirements not covered by the major, one half (0.5) hour of College Level requirements, six (6) hours of courses that covers ethics and society, thirty (30) hours of mathematics and basic science, fifteen (15) hours of a core of computer science courses, twenty four (24) hours of a core of electrical engineering courses, seventeen (17) hours of a core of security related courses, six (6) hours of a security capstone sequences, and nine (9) hours of technical electives. The attached table provides the given requirements.

Course Prefix	Course Number	Course Title	Gen Ed Category	Tot. credit hours
General Education				
Foundations	Written Comm.		FWC	3
Foundations	Advanced Writing		FAW	3
Foundations	Quantitative Reasoning*		FQR	
Foundations	Intercultural Explorations		FIE	3
Pillars	Texts and Contexts		PHTC	3
Pillars	Natural Science*		PNS	
Pillars	Humanities: Arts		PHA	3
Pillars	Social or Behav. Sciences		PSBS	3
Arches	Constructed World*		ACSW	
Arches	Natural World*		ANW	
Arches	Connected World*		ACNW	
Sub-Total				18
College Requirements				
ET	1500	Career Orientation		0.5
Sub-Total				0.5
Ethics and Society				
CS	2653	Professional/Ethical Computing	BER, BDP	3

ET	2905	History of Tech. in Society	ACNW	3
Sub-Total				6
Mathematics and Science				
MATH	2301	Calculus I	ACSW	4
MATH	2302	Calculus II	FQR	4
MATH	3070	Number Theory		3
CS	3000	Intro to Discrete Structures		4
EE	3713	Applied Prob & Stat. for EE		3
CHEM	1510	Fund of Chem I	PNS	4
PHYS	2054	General Phys I		3
PHYS	2055	General Phys I Lab		1
PHYS	2053	Contemp. Phys: Relativity/Quantum	ANW	3
ASTR	1400	Observational Astronomy Lab		1
Sub-Total				30
Computing Core				
CS	2400	Intro to Computer Science I		4
CS	2401	Intro to Computer Science II		4
CS	3560	Software Engineering Tools		3
CS	3610	Data Structures		4
Sub-Total				15
Electrical Engineering Core				
EE	1014	Intro to Electrical Engg.		4
EE	2104	Electric Circuits I		4
EE	2213	Instrumentation Laboratory		3
EE	3343	Electronics I		3
EE	3613	Computer Organization		3
EE	3753	Computer Networks		3
EE	3954	Microcontrollers		4
Sub-Total				24
Security Core				
SEC	1034	Intro to Cybersecurity Eng (new)		4
SEC	2244	Secure Digital Systems (new)		4
MIS	3800	Business System Security & Risk Mgmt		3
CS	4770	Intro to Software Security (new)		3
EE	4773	Foundations of Hardware security (new)		3
Sub-Total				17
Security Capstone				
SEC	4953	Capstone Design I (new)	BSL,BDL	3
SEC	4963	Capstone Design II (new)	BSL,BDL, Capstone	3

Sub-total				6
Technical Elective				
N/A	N/A	Tech Elective #1		3
N/A	N/A	Tech Elective #2		3
N/A	N/A	Tech Elective #3		3
Sub-Total				9

Students select three technical electives. At least two of these courses must come from the following list:

- EE 4783: Embedded Systems
- EE 4683: Computer Architecture
- CS 4420: Operating Systems
- CS 4750: Internet Engineering

The remaining technical elective can be one of the above courses or a course from the following list:

- ITS 4510 Network Security
- ITS 4530 Encrypted Communications
- ITS 4330 Compliance and Planning
- ITS 4310 Privacy
- QBA 4720: Predictive Analytics

A total of 125.5 credit hours are required and this is reflected in the model curriculum/course plan. This total assumes that students take a three credit Intercultural Explorations course (FIE) as part of their general education requirement. In principle, only two hours are required for that general education category. However, there are not currently available two-hour FIE courses

NOTIFICATIONS

1. University College

Program Code: ND1201

Program Name: Undecided

Contact: Dave Nguyen nguyend4@ohio.edu

Desired Start Date: Fall 2024

After comparing naming conventions against other institutions, University College requests a program name change from “Undecided” (Program Code ND1201) to “University-wide Major Exploration (Undecided)” (Program Code ND1201). We elect to call this program name change “university-wide” to differentiate this type of undecided experience from the ones offered by other colleges.

The proposed changes meet all the criteria listed below to be considered for an expedited process.

- No impact on programs, schools, or departments outside the originating college. It is the responsibility of the college to facilitate inter-departmental communication and collaboration.
- No change in total credit hour requirements.
- No impact on student’s ability for timely completion of program.
- No conflict with existing University requirements, such as residency or general education requirements.

- Needing no additional approvals due to external policy bodies such as accreditors or the Ohio Department of Higher Education.

2. University College

Request for new course prefix

University College requests the creation of a new EXPL prefix for Experiential Learning courses to be developed in partnership with the Center for Advising, Career, and Experiential Learning (ACE). The EXPL prefix will be assigned to various courses when they are created.

3. College of Health Sciences and Professions

Program Codes No Longer Needed

This is a notification that the following program codes are no longer needed and can be deleted. CHSP still has these programs, however, these old codes represent hybrid and online programs. For example, MS1219 was a hybrid program and MS229 was an online program.

- MS1216/MS1227: Admin & Family Nurse Practitioner
- MS1218/MS1228: Nurse Educator and Administrator
- MS1219/MS1229: Educator and Family Nurse Practitioner

REVISED GUIDELINES & TEMPLATES

1. Programs Committee Guidelines
2. Accelerated Graduate Pathway
3. New Graduate Certificate
4. New Undergraduate Certificate
5. New Graduate Degree Program
6. New Professional Graduate Degree Program
7. New Undergraduate Degree
8. Program or Certificate Change
9. New Undergraduate Minor