Catalog Year 2022-23
Mathematics, B.S. – Actuarial Science
Eastern Connecticut State University

Please contact a campus advisor for this program:
Professor Marsha Davis, Davisma@easternct.edu

These requirements are effective if you declared the *Transfer Ticket CSCU Pathway Transfer Degree: Mathematics Studies, A.A.* major for the 2016/17 through 2022/23 academic year.

Follow this [link](#) for important information about when and how to apply for transfer to a State University or Charter Oak State College.

Once you complete the *CSCU Pathway Transfer Degree: Mathematics Studies, A.A.*, the following requirements remain at Eastern Connecticut State University for you to complete the *Mathematics, B.A.* You should meet with your campus contact for this program before registering for courses to ensure that you select the correct courses and the best order for taking them.

General Education Requirements: **16-22 credits**
[Link to course options for general education](#)

Cultural Perspectives (select one):	3 credits
Individuals and Societies (select one):	3 credits
Creative Expressions (select one):	3 credits
Applied Information Technologies:	4 credits
MATH 315 Applied Probability and Statistics	
Tier 3 Capstone:	3 credits
Foreign Language Proficiency:	0-6 credits
[Link to foreign language proficiency requirements](#)	

Major Program Requirements: **31 credits**

If you did not take MAT 287 Foundations of Mathematics at the community college, then take:	0-3 credits
MAT 230 Discrete Structures	
If you did not take MAT 272/274 Linear Algebra at the community college, then take:	0-3 credits
MAT 310 Applied Linear Algebra	
If you took MAT 285/286 Differential Equations at the community college, then take one additional MAT course numbered 300 or above. If you did not take MAT 285/286 Differential Equations at the community college, then take two additional MAT courses numbered 300 or above. These courses may not include MAT 303 or internships.	3-6 credits
You will complete 9 credits from the courses above.	(9 credits)
Select one of the following two:	3 credits
MAT 320 Number Theory	

MAT 380 Geometry	
MAT 342 Explorations in Data Science	3 credits
MAT 355 Probability	3 credits
MAT 356 Financial Math	3 credits
MAT 420 Real Analysis I	4 credits
MAT 421 Real Analysis II	3 credits
CSC 305 Data Mining & Applications or other approved data mining course	3 credits

Unrestricted Electives: **7-13***

*Your total number of unrestricted elective credits will depend upon how you met your foreign language proficiency requirement.

Remaining credits for the Mathematics, B.S. --- Actuarial Science: **60 credits**