

**"Normal" Actuarial Science Major (ACTSC) Sample Schedule (for entry into Major at end of 3<sup>rd</sup> semester - revised 4/24/2023)**

For students with 4/5 in AP Calc, good Math scores (e.g., 670 in SAT or 28 in ACT), & good GPA (3.5 out of 4 in HS & 3.50 in 1<sup>st</sup> semester)

**SOA/CAS Exams & VEE**

1 <sup>st</sup> Semester		2 <sup>nd</sup> Semester	
PSU 006 – First Year Seminar	1	§ MGMT 301 – Management	3
§ ENGL 015 or 030 (GWS) – English Composition	3	§SCM 200 (GQ) or STAT 200 – Statistics	4
§ MATH 141 (GQ) –Calc II - take 140 in summer if not waived <sup>1</sup>	4	§ MATH 231 - Calculus III	2
§ ECON 102 (GS) – Microeconomics <b>VEE (B- or better or AP 4/5)</b>	3	§MKTG 301 – Marketing	3
§ACCTG 211 – Accounting <b>VEE</b>	4	† Foreign Language 002	4
<b>Sign up for Actuarial Club <a href="#">listserv</a> ASAP</b> Semester Credits	<b>15</b>	Semester Credits	<b>16</b>
3 <sup>rd</sup> Semester		4 <sup>th</sup> Semester	
STAT 414– Probability Theory	3	RM 410 – Financial Math for Actuaries <b>FM Exam</b>	3
§ FIN 301 – Finance <b>VEE</b>	3	STAT 415 - Mathematical Stat <b>VEE</b>	3
ECON 104 (GS) – Macroeconomics <b>VEE</b>	3	ENGL 202D – Business Writing	3
† Foreign Language 003	4	MIS 250	3
RM 214 - Review of Probability <b>P Exam</b>	1.5		
<b>Attend Resume Workshop &amp; Career Fair</b> Semester Credits	<b>14.5</b>	<b>Mock Interviews with Mentors</b> Semester Credits	<b>12</b>
5 <sup>th</sup> Semester		6 <sup>th</sup> Semester	
RM 411 –Actuarial Mathematics I <b>for FAM-L/CAS MAS-I</b>	3	RM 421 – Prop & Casualty Ins <b>FAM-S/MAS-II in July</b>	3
RM 320W - Risk Management & Insurance	3	General Education Natural Sciences (GH/GS/GA)	3
BA 342 – Business Ethics	3	Gen Education (GA/GH/GS)	3
General Education (GN)	3	BLAW 341 – Business Law I: Contracts, Liab & Property	3
CAS 100 (GWS) – Speech Communication	3	General Education Natural Science (GN)	3
Semester Credits	<b>15</b>	Semester Credits	<b>15</b>
7 <sup>th</sup> Semester		8 <sup>th</sup> Semester	
RM 422 – Actuarial Mathematics II <b>A-STAM Exam</b>	3	RM 412 – Actuarial Mathematics II <b>A-LTAM Exam</b>	3
RM 430 – Life and Health Insurance	3	1 or 2 General Education (GHW)	3
BA 411 – Analyzing Business and Industry	3	3 General Education (GA/GH/GS)	9
General Education Natural Science (GN)	3		
STAT 462	3		
Semester Credits	<b>15</b>	Semester Credits	<b>15</b>

§ Entrance-to-Major courses. **You need ETM before taking RM 410, so take FIN 301 before 4th semester!** You also need a 3.20 Cum and 40 credits.

† Students must complete 12th credit level in a foreign language. Credits vary based on skill level. Courses in **Bold** require a grade of "C" or higher.

Courses in *Italics* satisfy general education and degree requirements.

Actuarial Science students need to be very good in Mathematics (particularly Calculus and Sums of Geometric Series) to be successful in getting an actuarial degree. Actuarial students often get a 5 on the AP Calculus Exam and can skip MATH 140 and go right into MATH 141. Use this [Math Department advising website](#) to determine whether that makes sense for you. It will help you take the actuarial exam courses sooner. **This sample schedule helps you pass 3 or more actuarial exams by your Junior year, which is valuable for getting an internship and a full-time job. However, there is a risk that your ETM & Overall GPAs could go below 3.20, making it impossible to pursue a Smeal Major.**

PSA: If you are planning on taking a Penn State (beside Actuarial Science Courses like RM 410,411) course to aid studying for an exam, there's a high probability that studying directly for the exam through CA, TIA, or ACTEX would be easier and more beneficial.

**\*\*Students have the choice of either RM 422 or RM 412 depending on preference**

- ACCTG 211 can be taken at most Commonwealth Campuses, or via web in the summer from anywhere. Smeal students can only take the UP web version, not the World Campus version.
- To catch up, STAT 414 can be taken concurrently with MATH 231 if you also take RM 214 concurrently.
- Take RM 214 with STAT 414, as it helps you pass STAT 414 and the Probability Theory exam given by the SOA.
- RM 320W, 411, 430 are offered in the fall semester only. RM 412, 421 are offered in the spring semester only.
- STAT 462 required; STAT 483 (SAS) can be taken instead of STAT 462
- Sign up for the Actuarial Science [listserv](#) asap. It provides lots of great information on the Actuarial Science Career Fair, Employer Information Sessions, the Actuarial Exams, how to get internships and jobs, and Actuarial Science club meetings.
- If you want to get a STAT minor, here are some courses and their help for respective exams
  - Stat minor: STAT 414/415 & 10 credits of 400 level courses. STAT 557 or 380 helps SRM exam. STAT 380 has prereq = STAT 184 or 485
  - STAT 462 - Regression Analysis for SRM/CAS MAS-I
  - STAT 463–Time Series for SRM & MAS-I exam
  - STAT 416-Stochastic Processes take MAS-I
  - STAT 483–SAS (or 480/481/482 sequentially (SAS coding)
  - STAT 380 (or 557) - Data Science for SRM
  - STAT 440 (Computational Stat) for ATPA Exam
- We encourage students to Study Abroad in the winter and summer breaks. It is important to do an internship in the summer after your junior year, as employers generally want Full-Time candidates to have had an internship.

**\*\*Any Gen Eds are interchangeable**

