

# MATHEMATICAL SCIENCES, B.S.

**Begin Campus:** Any Penn State Campus

**End Campus:** Harrisburg

## Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2023-24 academic year. To access previous years' suggested academic plans, please visit the archive (<https://bulletins.psu.edu/undergraduate/archive/>) to view the appropriate Undergraduate Bulletin edition (*Note: the archive only contains suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin*).

### Data Science Option: Mathematical Sciences, B.S. at Harrisburg Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

Fall	Credits	Spring	Credits
CMPSC 131 <sup>*#</sup>	3	CAS 100A or 100S <sup>‡</sup>	3
ENGL 15, 15S, 30T, or ESL 15 <sup>‡</sup>	3	CMPSC 132 <sup>*#</sup>	3
MATH 140 <sup>**†</sup>	4	MATH 141 <sup>**†</sup>	4
General Education Course	3	MATH 220	2
General Education Course	3	General Education Course	3
	<b>16</b>		<b>15</b>

#### Second Year

Fall	Credits	Spring	Credits
DS 220	3	ENGL 202C <sup>‡</sup>	3
MATH 230	4	MATH 251	4
MATH 311W <sup>*</sup>	3	STAT 401	3
General Education Course	3	General Education Course	3
General Education Course	3	General Education Course	1.5
	<b>16</b>		<b>14.5</b>

#### Third Year

Fall	Credits	Spring	Credits
General Education Course	3	CMPSC 445	3
MATH 430 <sup>*</sup>	3	MATH 414	3
100-400 level General Elective	3	MATH 455 <sup>*</sup>	3
300-400 level Mathematics	3	100-400 level General Elective	3
General Education Course	3	300-400 level Mathematics	3
	<b>15</b>		<b>15</b>

#### Fourth Year

Fall	Credits	Spring	Credits
MATH 415	3	MATH 401 <sup>*</sup>	3
STAT 462	3	300-400 level General Elective	3
300-400 level General Elective	3	300-400 level Mathematics	3
300-400 level Mathematics	3	General Education Course	3
General Education Course	3	General Education Course	1.5
	<b>15</b>		<b>13.5</b>

#### Total Credits 120

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

#### University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

## General Option: Mathematical Sciences, B.S. at Harrisburg Campus

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### First Year

Fall	Credits	Spring	Credits
ENGL 15, 15S, 30T, or ESL 15 <sup>‡</sup>	3	CAS 100A or 100S <sup>‡</sup>	3
MATH 140 <sup>**†</sup>	4	MATH 141 <sup>**†</sup>	4
General Education Course	3	MATH 220	2
General Education Course	3	General Education Course	3
General Education Course	3	General Education Course	3
		General Education Course (GHW)	1.5
	<b>16</b>		<b>16.5</b>

### Second Year

Fall	Credits	Spring	Credits
CMPSC 121 or 131	3	ENGL 202C <sup>‡</sup>	3
MATH 230	4	MATH 251	4
MATH 311W <sup>*</sup>	3	STAT 401	3
General Education Course	3	100-400 level General Elective	3
General Education Course (GHW)	1.5	General Education Course	3
	<b>14.5</b>		<b>16</b>

### Third Year

Fall	Credits	Spring	Credits
MATH 318 or 414	3	MATH 455 <sup>*</sup>	3
MATH 425	3	100-400 level General Elective	3
MATH 430 <sup>*</sup>	3	300-400 level Mathematics <sup>1</sup>	3
300-400 level Mathematics <sup>1</sup>	3	300-400 level Mathematics <sup>1</sup>	3
General Education Course	3	General Education Course	3
	<b>15</b>		<b>15</b>

### Fourth Year

Fall	Credits	Spring	Credits
MATH 435	3	MATH 401 <sup>*</sup>	3
MATH 475Y	3	300-400 level Mathematics <sup>1</sup>	3
300-400 level Mathematics <sup>1</sup>	3	300-400 level General Elective	3
300-400 level Mathematics <sup>1</sup>	3	300-400 level General Elective	3
300-400 level General Elective	3		
	<b>15</b>		<b>12</b>

**Total Credits 120**

# Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

<sup>1</sup> Select any 300-400 level Mathematics

In consultation with adviser, select 18 credits of 300-400 level Mathematics courses or SSET 295. Up to six credits may be replaced by an 200 or greater level CMPSC courses or CMPSC 122.

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\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

## Secondary Education Option: Mathematical Sciences, B.S. at Harrisburg Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

### First Year

Fall	Credits Spring	Credits
ENGL 15, 15S, 30T, or ESL 15 <sup>**†</sup>	3 CAS 100A or 100S <sup>‡</sup>	3
HDFS 239 <sup>†</sup>	3 MATH 141 <sup>**†</sup>	4
MATH 140 <sup>**†</sup>	4 MATH 220 <sup>*</sup>	2
General Education Course	3 Select English Literature <sup>**†</sup>	3
General Education Course	3 General Education Course	3
	General Education Course (GHW)	1.5
	<b>16</b>	<b>16.5</b>

### Second Year

Fall	Credits Spring	Credits
CMPSC 121 or 131 <sup>*</sup>	3 ENGL 202C <sup>‡</sup>	3
EDPSY 14 <sup>**†</sup>	3 MATH 250 <sup>*</sup>	3
MATH 230 <sup>*</sup>	4 STAT 401 <sup>*</sup>	3
MATH 311W <sup>*</sup>	3 100-400 level support course	3
General Education Course	3 General Education Course	3
	General Education Course (GHW)	1.5
	<b>16</b>	<b>16.5</b>

### Third Year

Fall	Credits Spring	Credits
EDUC 313 <sup>*</sup>	2 EDUC 315Y <sup>*</sup>	3
EDUC 314 <sup>*</sup>	3 EDUC 458 <sup>*</sup>	3
MATH 425 <sup>*</sup>	3 EDUC 466N <sup>**†</sup>	3
MATH 430 <sup>*</sup>	3 MATH 401 <sup>*</sup>	3
MATH 435 <sup>*</sup>	3 MATH 427 <sup>*</sup>	3
MATH 475Y <sup>*</sup>	3	
	<b>17</b>	<b>15</b>

### Fourth Year

Fall	Credits Spring	Credits
EDUC 400 <sup>*</sup>	3 EDUC 490 <sup>*1</sup>	12
EDUC 417 <sup>*</sup>	3	
EDUC 459 <sup>*</sup>	3	
300-400 level support course in Computer Science, Education, Mathematics, or Statistics (EDUC 495 recommended for those in residency program) <sup>*</sup>	3	
	<b>12</b>	<b>12</b>

**Total Credits 121**

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

<sup>1</sup> EDUC 490 - Student Teaching

A minimum GPA of 3.00 in all previous work is required for admission to EDUC 490.

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### Program Notes

Students must complete, with a grade of "C" or higher, six (6) credit of college level mathematics, three (3) credits of college level English literature and three (3) credits of college level English composition. Students must also complete MATH 140 and MATH 141 for entrance to Secondary Education Option of Mathematical Sciences.