

# MAJOR COURSE RECOMMENDATIONS

Major Course Recommendations and/or information on the following majors:

**Art (p. 1)**  
**Biology (p. 1)**  
**Business Administration, Accounting, Marketing or Economics (p. 1)**  
**Chemistry (p. 1)**  
**Chemistry with a Biochemistry Concentration (p. 2)**

**Dual Degree Program in Engineering with the University of Notre Dame (p. 3)**  
**Education (p. 2)**  
**Global Studies (p. 2)**  
**Mathematics, Statistical and Actuarial Mathematics, Computing and Applied Mathematics, Physics and Applied Mathematics (p. 2)**  
**Music, Music Education (p. 2)**  
**Nursing Science (p. 2)**  
**Physics (p. 2)**  
**Pre-Health Professions (p. 4)**  
**Speech Language Pathology (p. 3)**  
**Undecided (p. 1)**

## Undecided but not considering any of the majors below

Register for five courses. There are no specific courses required in the first semester, so please choose your courses from the Sophia Program Course Offerings. We recommend the following:

- Critical Thinking Seminar
- Modern Language
- Three additional Sophia Program courses

If you are interested in a specific major, take a course in that subject. Choose courses you will like. Do not take a class that you suspect will be very difficult for you

## Art, Concentration in Studio Art, Design, or Applied Arts and Design

| Code    | Title      | Credits |
|---------|------------|---------|
| ART 101 | Drawing I  | 3       |
| ART 103 | Design Lab | 3       |

Choose three additional courses from the Sophia Program Course Offerings

## Art, Concentration in Art History

| Code    | Title                | Credits |
|---------|----------------------|---------|
| ART 101 | Drawing I            | 3       |
| ART 241 | Art History Survey I | 3       |

Choose three additional courses from the Sophia Program Course Offerings

## Biology

| Code    | Title                                | Credits |
|---------|--------------------------------------|---------|
| BIO 155 | Foundations of Molecular Biology     | 2       |
| BIO 156 | Foundations of Ecology and Evolution | 2       |

If your math background is strong or you are also considering a chemistry major, take the following:

|          |                           |   |
|----------|---------------------------|---|
| CHEM 121 | Principles of Chemistry I | 4 |
| MATH 131 | Calculus I                | 4 |

If you are not calculus ready, take the following:

|          |  |   |
|----------|--|---|
| MATH 103 | Precalculus (in the fall of your first year) | 3 |
|----------|--|---|

W course in the fall or spring

Also choose one to three additional courses (one should be your modern language) from the Sophia Program Course Offerings

## Business Administration, Accounting, Marketing or Economics

| Code     | Title                        | Credits |
|----------|------------------------------|---------|
| ECON 252 | Principles of Microeconomics | 3       |

Choose four additional courses from the Sophia Program Course Offerings

To be officially accepted into the BBA programs at the end of sophomore year, a student must maintain a 2.5 grade point average in the following courses:

| Code     | Title                                   | Credits |
|----------|---|---------|
| BUAD 201 | Principles of Financial Accounting (3)  |         |
| BUAD 202 | Principles of Managerial Accounting (3) |         |
| BUAD 221 | Principles of Management (3)            |         |
| BUAD 231 | Principles of Marketing (3)             |         |
| ECON 251 | Principles of Macroeconomics (3)        |         |
| ECON 252 | Principles of Microeconomics (3)        |         |

## Chemistry

| Code                         | Title | Credits |
|------------------------------|-------|---------|
| <b>Fall (First) Semester</b> |       |         |

|          |                           |   |
|----------|---------------------------|---|
| CHEM 121 | Principles of Chemistry I | 4 |
|----------|---------------------------|---|

Select one of the following by placement:

|          |                                    |   |
|----------|------------------------------------|---|
| MATH 131 | Calculus I                         | 4 |
| MATH 132 | Calculus II                        |   |
| MATH 133 | Theory and Application of Calculus |   |
| MATH 231 | Calculus III                       |   |

|                 |  |   |
|-----------------|--|---|
| Modern Language |  | 4 |
|-----------------|--|---|

|                   |  |   |
|-------------------|--|---|
| Sophia "W" course |  | 4 |
|-------------------|--|---|

|         |   |   |
|---------|---|---|
| AVE 110 | Introduction to STEM Studies (highly recommended) | 1 |
|---------|---|---|

### Spring (Second) Semester

|          |                            |   |
|----------|----------------------------|---|
| CHEM 122 | Principles of Chemistry II | 4 |
|----------|----------------------------|---|

|          |  |   |
|----------|--|---|
| PHYS 121 | General Physics I: Mechanics and Waves | 4 |
|----------|--|---|

Select one of the following by sequence - e.g. Calc II if you took Calc I in the fall:

|          |   |  |
|----------|---|--|
| MATH 132 | Calculus II                               |  |
| MATH 231 | Calculus III                              |  |
| MATH 326 | Linear Algebra and Differential Equations |  |

|   |   |
|---|---|
| Modern Language   | 4 |
| If you are not calculus ready, then see below:              |   |
| MATH 103    Precalculus (in the fall)                       | 3 |
| MATH 131    Calculus I (in the spring)                      | 4 |
| CHEM 121    Principles of Chemistry I (take as a sophomore) | 4 |

## Chemistry with a Biochemistry Concentration

| Code   | Title   | Credits |
|--|---|---------|
| <b>Fall (First) Semester</b>   |   |         |
| CHEM 121   | Principles of Chemistry I                         | 4       |
| BIO 155  | Foundations of Molecular Biology                  | 2       |
| BIO 156  | Foundations of Ecology and Evolution              | 2       |
| Select one of the following by placement:  |   | 4       |
| MATH 131   | Calculus I  |         |
| MATH 132   | Calculus II                                       |         |
| MATH 133   | Theory and Application of Calculus                |         |
| MATH 231   | Calculus III                                      |         |
| Modern Language  |   | 4       |
| AVE 110  | Introduction to STEM Studies (highly recommended) | 1       |
| <b>Spring (Second) Semester</b>  |   |         |
| CHEM 122   | Principles of Chemistry II                        | 4       |
| BIO 157  | Foundations of Cellular Biology                   | 2       |
| BIO 158  | Foundations of Form and Function                  | 2       |
| Select one of the following by sequence - e.g. Calc II if you took Calc I in the fall: |   | 4       |
| MATH 132   | Calculus II                                       |         |
| MATH 231   | Calculus III                                      |         |
| If you have completed math, then a "W" class   |   |         |
| Modern Language  |   | 4       |
| If you are not calculus ready, then see below:   |   |         |
| MATH 103   | Precalculus (in the fall)                         | 3       |
| MATH 131   | Calculus I (in the spring)                        | 4       |
| CHEM 121   | Principles of Chemistry I (take as a sophomore)   | 4       |

## Education

Education majors must have a 2.75 cumulative grade point average to be admitted to the major. For additional information, please see the College Bulletin for 2024-2025.

## Global Studies

Students must have an average grade of C+ (2.33/4.0) or better in Sophia modern language courses at the intermediate level for French, German, Italian, or Spanish and at the introductory level for Arabic or Chinese, or equivalent to be accepted into the global studies major.

## Mathematics, Statistical and Actuarial Mathematics, Computing and Applied Mathematics, Physics and Applied Mathematics

| Code  | Title                              | Credits |
|---|------------------------------------|---------|
| Select one of the following (based on placement): |                                    |         |
| MATH 131  | Calculus I                         |         |
| MATH 132  | Calculus II                        |         |
| MATH 133  | Theory and Application of Calculus |         |

|  |                                   |   |
|--|-----------------------------------|---|
| MATH 231   | Calculus III                      |   |
| If you are not calculus ready take the following:                                |                                   |   |
| MATH 103   | Precalculus (this fall or summer) | 3 |
| Or, depending on placement, MATH 101: College Algebra                            |                                   |   |
| Choose three to four additional courses from the Sophia Program Course Offerings |                                   |   |

## Music, Music Education

| Code   | Title                                      | Credits |
|--|--|---------|
| MUS 181  | Patterns in Music 1 Beginning Music Theory | 3       |
| MUS 181L   | Patterns in Music 1 Lab - Theory 1 Lab     | 1       |
| MUS 102  | Class Piano - Proficiency                  | 1       |
| MUS 100  | Recital Forum                              | 0       |
| Select one to two hours of applied music lessons, indicate the instrument or voice in which you intend to major  |  | 1-2     |
| Select one hour of choir or instrumental ensemble (Belles Voix, Collegiate Choir, String Ensemble, ND Band, ND Orchestra)  |  | 1       |
| Select three additional courses from the Sophia Program Course Offerings   |  |         |
| If a Music major has room in her schedule and is interested, she may want to take MUS 243 Latin American and Latino Popular Music, as it will eventually be required |  |         |
| The Critical Thinking Seminar, MUS 150 Voices in Time (CTS), would be an excellent choice for any student majoring or considering majoring or minoring in music      |  |         |

## Nursing Science

| Code   | Title  | Credits |
|--|--|---------|
| BIO 141  | Human Anatomy and Physiology I (required in the first semester to be on track for completion of major in four years) | 4       |
| Modern Language  |  | 4       |
| Critical Thinking Seminar or W course                                |  | 3       |
|  |  | or      |
|  |  | 4       |
| Select one of the following (based on placement) or a Sophia course: |  | 3       |
| MATH 101   | College Algebra  |         |
| MATH 104   | Finite Mathematics   |         |

If possible, by the end of the first year, you should have completed the two-semester modern language requirement, critical thinking seminar, writing proficiency requirement, and MATH 104 or higher.

## Admission to the Nursing Science Major

To be officially accepted into the nursing science major at the end of the first semester of the sophomore year, Intended Nursing majors must achieve a 2.8 cumulative grade point average and a 2.8 cumulative grade point average in the science prerequisite courses.

Nursing majors must maintain a 2.8 cumulative grade point average and a 2.8 cumulative grade point average in the science prerequisite courses in order to progress into the NURS courses in the second semester of the sophomore year.

## Physics

| Code                         | Title                     | Credits |
|------------------------------|---------------------------|---------|
| <b>Fall (First Semester)</b> |                           |         |
| CHEM 121                     | Principles of Chemistry I | 4       |

|  |   |
|--|---|
| Select one of the following by placement:  | 4 |
| MATH 131 Calculus I  |   |
| MATH 132 Calculus II   |   |
| MATH 133 Theory and Application of Calculus  |   |
| MATH 231 Calculus III  |   |
| Modern Language  | 4 |
| <b>Spring (Second Semester)</b>  |   |
| PHYS 121 General Physics I: Mechanics and Waves  | 4 |
| CHEM 122 Principles of Chemistry II  | 4 |
| Select one of the following by sequence (e.g. Calc II if you took Calc I in the fall): | 4 |
| MATH 132 Calculus II   |   |
| MATH 231 Calculus III  |   |
| MATH 326 Linear Algebra and Differential Equations                                     |   |
| Or – if you have completed math, then a "W" class                                      | 4 |
| Modern Language  | 4 |

## Speech Language Pathology

Saint Mary's College offers two programs of study in speech language pathology: a four year BA and a 4+1 BA-MS.

The course schedule for these programs is sequenced. This means that most required courses have prerequisites, where it is important to take courses in a specific order, as this provides the students with the appropriate steps in their learning process in order to acquire the knowledge and skills required to complete their clinical practicum in their senior year and prepare for graduate work. In the first year of studies, students interested or intended in either speech language pathology programs should consider the following courses:

| Code                            | Title  | Credits |
|---------------------------------|--|---------|
| <b>Fall (First Semester)</b>    |  |         |
| Sophia LO1                      | Mathematical Arts course                                   | 3       |
|                                 | Modern Language I  | 4       |
|                                 | Psychology - only one of the following:                    | 3       |
| PSYC 156                        | Introduction to Psychology: Culture and Systems            |         |
| PSYC 157                        | Introduction to Psychology: Science for the Citizen        |         |
|                                 | Speech Language Pathology                                  |         |
| SLP 220                         | Introduction to Communicative Disorders                    | 3       |
| <b>Spring (Second Semester)</b> |  |         |
|                                 | Modern Language II   | 4       |
| SLP 230                         | Anatomy and Physiology of the Speech and Hearing Mechanism | 3       |
|                                 | If you have completed math, then a "W" class               | 4       |

Criteria for continuation into the speech language pathology (SLP) 4+1 program include a minimum prerequisite SLP GPA of 3.25 and a cumulative grade point average of 3.0 at the end of the first semester of junior year.

## Dual Degree Program in Engineering with the University of Notre Dame

Engineering majors must also have a Saint Mary's major, which is typically chemistry (CHEM), mathematics (CAM, MATH, PAM), or physics (PHYS).

| Code                            | Title   | Credits |
|---------------------------------|---|---------|
| <b>Fall (First) Semester</b>    |   |         |
| CHEM 121                        | Principles of Chemistry I (with lab)  | 4       |
|                                 | Sophia "W" course   | 4       |
|                                 | Select one of the following MATH courses by placement:                            | 4       |
| MATH 131                        | Calculus I  |         |
| MATH 132                        | Calculus II   |         |
| MATH 133                        | Theory and Application of Calculus  |         |
| MATH 231                        | Calculus III  |         |
|                                 | Modern Language I   | 4       |
| AVE 110                         | Introduction to STEM Studies  | 1       |
| <b>Spring (Second) Semester</b> |   |         |
| CHEM 122                        | Principles of Chemistry II (with lab)   | 4       |
| PHYS 121                        | General Physics I: Mechanics and Waves (with lab)                                 | 4       |
|                                 | Select one of the following MATH courses by sequence:                             | 4       |
| MATH 132                        | Calculus II   |         |
| MATH 231                        | Calculus III  |         |
| MATH 326                        | Linear Algebra and Differential Equations   |         |
|                                 | Modern Language II  | 4       |
|                                 | Two Sophia Courses - PHIL 110 Introductory Philosophy (recommended) and one other | 3       |

### DUAL DEGREE IN ENGINEERING PROGRAM

Saint Mary's College and the University of Notre Dame offer a Five-Year Dual Degree Program in Engineering, leading to a bachelor's degree from Saint Mary's at the end of the fourth year, and a second bachelor's degree from the University of Notre Dame in one of the engineering programs at the end of the fifth year. To be eligible for this five-year program, the student must be calculus ready as a first-year student.

Saint Mary's students who participate in this program work with the Engineering Program Director. They take pre-engineering courses (e.g., calculus, physics, chemistry) at Saint Mary's and engineering courses at Notre Dame, in addition to the courses required to satisfy degree requirements of a major at Saint Mary's College. At the end of her fourth year, the student applies for transfer to the College of Engineering at the University of Notre Dame.

Notre Dame courses are used as electives to satisfy Saint Mary's degree requirements, and Saint Mary's courses are used as electives to satisfy Notre Dame's degree requirements. Some related options include: a chemistry major at Saint Mary's and a chemical engineering major at Notre Dame, a computer and applied mathematics major at Saint Mary's and a computer science engineering major at Notre Dame, a physics and applied mathematics major at Saint Mary's and an electrical engineering major at Notre Dame, and a physics major at Saint Mary's and a mechanical engineering major at Notre Dame.

A Saint Mary's student must have completed at least 96 semester hours with a cumulative GPA of 2.8 or higher (technical and overall) for acceptance to Notre Dame at the end of her fourth year. For this reason, to be "accepted" into the engineering program in the sophomore year a student must have at least a cumulative GPA of 2.8 or above (technical and overall) and must maintain a 2.8 cumulative GPA to remain in the program. This strenuous program will demand the best effort of well-prepared and well-motivated students. Consultation with the program director and careful scheduling of courses on both campuses must be

conducted each semester. For additional information, please see the College Bulletin for 2024-2025.

## Pre-Health Professions

Students can enter a health professions graduate program from a completed major in any discipline at Saint Mary's College as long as they do well. Students should strive for a cumulative GPA of 3.6 or better to be competitive. All graduate health professions programs require an admission test in spring of the junior year or summer after the junior year. These include but are not limited to the MCAT for medical and podiatry school, DAT for dental school, GRE for vet school, OAT for optometry, PA-CAT or GRE for physician assistant studies, and GRE for most of the others.

Once students have established themselves academically (typically after the first full year of course work), they should begin to get involved in on or off-campus activities where they are truly contributing. Leadership and service are important. This includes demonstrating an ability to work with all kinds of people. Most of the health professions programs do want some hours of shadowing or volunteering in a medical setting similar to their interests. Research experience is strongly encouraged for many health professional programs. Students should be aware of any such requirements.

A basic core of courses is required for health professions programs, all of which can be taken at Saint Mary's College. All pre-health students, no matter the program, should plan to take the following listed below during their first semester at Saint Mary's:

| Code                 | Title  | Credits |
|----------------------|--|---------|
| BIO 155<br>& BIO 156 | Foundations of Molecular Biology<br>and Foundations of Ecology and Evolution | 4       |
| CHEM 121             | Principles of Chemistry I *  | 4       |
| Modern Language I    |  | 4       |

Also choose 1-2 additional Sophia courses from the Sophia Program Course Offerings

\*If the student is not Calculus ready, the student must take the following instead of CHEM 121:

|          |  |   |
|----------|--|---|
| MATH 103 | Precalculus <small>(in the fall of their first year)</small> | 3 |
|----------|--|---|

If the student is Calculus ready, it is imperative that they take CHEM 121 in their first year to be able to apply to enter their professional program directly after graduation from Saint Mary's. If the student is not Calculus ready, but would like to enter their health professional program right after graduation from Saint Mary's, the student should plan to take MATH 103 during the summer online through Saint Mary's.

These courses are prerequisites necessary for all health professional programs. Details on future courses for specific health professions can be found in the College Bulletin.

Saint Mary's College is an affiliate in the Lake Erie College of Medicine Early Acceptance Program in which students can be accepted early into either their medical, dental, podiatry, or pharmacy programs. Saint Mary's College students can apply for this program as incoming first year students through the end of their sophomore year. Applicants must meet these general requirements:

- Must be a U.S. citizen or permanent resident (international students may apply to Pharmacy);
- Must not hold a bachelor's degree or higher;

- Must have at least two years remaining as a full-time student at the undergraduate institution;
- SAT score (Math and Verbal Reasoning) greater than or equal to 1170 on a single exam taken before 3/1/2016, an SAT score of 1240 or higher on a single exam taken after 3/1/2016 or an ACT composite score greater than or equal to 26 on a single exam;
- A high school GPA of 3.5 or higher on a 4.0 scale;
- Students already attending the affiliate institution must have a cumulative overall GPA of 3.4 or higher and a science GPA of 3.2 or higher.

All interested students should contact Dr. Versagli (cversagli@saintmarys.edu) as soon as possible.