

47645 College Drive St. Mary's City, MD 20686-3001

Addendum to the 2016-17 Catalog

This Addendum is an integral part of the College's Catalog. The contents of this catalog addendum are provided as an update and in addition to the content specified in the 2016-2017 catalog. Effective Fall 2016.

St. Mary's College of Maryland has made every reasonable effort to determine that everything stated in the academic catalog is accurate. Sometimes changes to the academic catalog are necessary after the date of publication. Courses and programs offered, together with other matters contained herein, are subject to change at the discretion of the college.

Effective as of 9/13/2016 the Physics and Mechanical Engineering Double Degree has been removed and will not be available to students.

http://www.smcm.edu/catalog/degree-requirements/double-degree-program-in-physics-and-mechanical-engineering/.

Physics and Mechanical Engineering Double-Degree Involving ST. MARY'S COLLEGE OF MARYLAND, THE A. JAMES CLARK SCHOOL OF ENGINEERING, UNIVERSITY OF MARYLAND, and the College of Southern Maryland

In addition to the two courses of study in Physics leading to the major, the Physics department of St. Mary's College of Maryland, the College of Southern Maryland, and the Clark School of Engineering of the University of Maryland – College Park offer a joint course of study leading to undergraduate degrees in Physics and Mechanical Engineering. These courses are offered for students interested in pursuing either a career or graduate school in Engineering or related programs or careers in the applications of technology. It is meant for students who are passionately interested in engineering but wish to also keep the advantages of study at a small undergraduate institution. Almost all of the courses in this program can be taken within St. Mary's County. Any students interested in pursuing this program must meet with the chair or another representative of the Physics department before commencing it.

A student in this program will attend St. Mary's College of Maryland (SMCM) for the equivalent of approximately three (3) or four (4) academic years (minimum of 96 hours), completing requirements for a major in physics as described below, and will also take courses leading to a major in Mechanical Engineering in the program administered by the A. James Clark School of Engineering at the University of Maryland – College Park. The bulk of Engineering and pre-Engineering courses are offered by the

University of Maryland (UMD) at the Southern Maryland Higher Education Center (SMHEC) and the College of Southern Maryland (CSM) as described below.

After completing the required courses at St. Mary's College as listed below, and a total of 128 hours between the three institutions, the student will be awarded a bachelor's degree with a major in physics by St. Mary's College. After completing the requirements of the Clark School of Engineering for the Degree of Mechanical Engineering as listed below, the student will be awarded a Baccalauureate degree by the University of Maryland. While the course of study is designed to have some flexibility. Please note that we do not list general education requirements for the University of Maryland, as these requirements may change over time: it is up to the student to insure that he or she satisfies the UMD general education requirements. It is also up to her or him to insure that the transfer of course credit for any courses not explicitly listed here is done; their advisor will be able to help them do that.

Major Requirements

- 1. Requirements for DDMPE students while at St. Mary's:
 - Completion of the required courses in the Dual-Degree Study Program, as approved by designated official (see 3 below).
 - Completion of a minimum of 96 credit hours
 - Completion of the Core Curriculum requirements.
 - Completion of the requirements for a major in physics, as approved by the department chair. Completion of two 400-level engineering courses in the ME program will satisfy the St. Mary's Project for the physics major with concentration in fundamental physics. Completion of two 400-level engineering courses will satisfy the requirement for the completion of PHYS 475 & 476 (Topics in Applied Physics 1 & 2) for the physics major with concentration in applied physics.
 - A minimum cumulative grade-point average of 2.0.
 - Recommendation from designated official at St. Mary's.
 - The general college requirement that at least 30 of the last 36 credit hours of academic work toward the degree must be SMCM courses is waived.
- 2. Requirements for DDMPE students in the Mechanical Engineering program:
 - Admission to the Clark School of Engineering SMHEC Mechanical Engineering program.
 - Completion of 128 credit hours, including credits earned at St. Mary's College of Maryland
 - Completion of the Engineering courses listed below.
 - Completion of distribution requirements for the UMD Mechanical Engineering major.
- 3. The required St. Mary's Courses in the DDPME depend on the concentration in the physics major. All courses listed below are 4 credits unless otherwise noted.
 - For the concentration in fundamental physics (48 credit hours):

■ MATH 151: Calculus I

■ MATH 152: Calculus II

■ MATH 255: Vector Calculus

- MATH 256: Linear Algebra
- PHYS 151: Fundamentals of Physics I (recommended) or PHYS 141 General Physics I
- PHYS 152: Fundamentals of Physics II (recommended) or PHYS 142 General Physics II
- PHYS 251: Fundamentals of Physics III
- PHYS 312: Advanced Physics Lab
- PHYS 342: Mechanics
- PHYS 351: Electricity & Magnetism
- PHYS 462: Quantum Mechanics
- PHYS 473: Statistical Mechanics
- For the concentration in applied physics (48 credit hours):
 - MATH 151: Calculus I
 - MATH 152: Calculus II
 - MATH 255: Vector Calculus
 - MATH 256: Linear Algebra
 - MTH2210 (CSM) (3 credits)
 - PHYS 151: Fundamentals of Physics I (recommended) or PHYS 141 General Physics I
 - PHYS 152: Fundamentals of Physics II (recommended) or PHYS 142 General Physics II
 - PHYS 251: Fundamentals of Physics III
 - PHYS 311: Electronics
 - PHYS 312: Advanced Physics Lab
 - PHYS 351: Electricity & Magnetism
 - PHYS 462: Quantum Mechanics
- 1. The required or recommended CSM courses for the DDPME are listed below. (Please note that one of the two courses CHE1350 or CHEM106 is required for the program, but not both.) Unless otherwise noted, all courses are 3 credits. Please note that MATH312 ("Differential Equations) cannot be taken as a substitute for MTH2210 ("Differential Equations") from CSM. (21 or 22 credit hours)
- MTH 2210: Differential Equations
- CHE 1350: General Chemistry for Engineers (recommended) or CHEM106: General Chemistry II (SMCM course) (4 credits)
- EGR 1100: Intro to Engineering
- EGR 1210: Statics
- EGR 2200: Mechanical Materials
- EGR 2210: Dynamics
- EGR 2320: Thermodynamics

- 1. The required UMD Courses for the DDPME are listed below. Unless otherwise noted, all courses are 3 credits. (54 credit hours).
- MATH 206: Introduction to MATLAB (online)
- ENME 331: Fluids I
- ENME 350: Electronics I
- ENME 392: Statistics
- ENME 272: Computer-Aided Design (CAD)
- ENME 332: Heat Transfer
- ENME 351: Electronics II
- ENME 361: Vibrations 1
- ENME 371: Product development
- ENME 393: Technical Writing (at College Park or online)
- ENME 489F: Flight
- ENME 489J: Fatigue
- ENAE 324: Structures
- ENME 462: Vibrations II
- ENME 382: Materials
- ENME473: Capstone (at College Park)
- ENME 489D: Fluid Dynamics
- ENRE 489G: Reliability

Effective as of 9/30/2016 updated language in the Reservation of the Right to Modify

Original Wording:

The provisions of this catalog are not to be regarded as an irrevocable contract between the College and the student, or between the College and the parents of a student. The College reserves the right to change any provisions or requirements at any time, but not to make such changes retroactive. While all efforts are made to ensure the completeness and accuracy of this catalog, the regulations and policies of the College are not changed by typographical or other errors.

In compliance with the Student Right-to-Know and Campus Security Act, Public law 101-542, St. Mary's College of Maryland will make available, upon request, a report on graduation rates and/or public safety.

New Wording:

The College reserves the right to change its policies, rules, regulations, requirements for graduation, course offerings, tuition, fees, other charges, or any other contents of this catalog at any time without published notice and without liability. The provisions of this catalog are not to be regarded as an irrevocable contract between the College and the student. Although every effort has been made to ensure the accuracy of the contents of the catalog, inaccuracies may occur. Any comments or questions regarding the catalog should be directed to the Office of the Registrar.

In compliance with the Student Right-to-Know and Campus Security Act, Public law 101-542, St. Mary's College of Maryland will make available, upon request, a report on graduation rates and/or public safety.

Effective as of 9/30/2016 updated language to the Academic Policy for Catalog Selection.

Original Wording:

The catalog year determines the set of general academic requirements the student must fulfill for graduation. All students follow the policies not connected with their major and minor that are in the current catalog regardless of their catalog year. Students are held to the academic requirements of the catalog year in which they enter St. Mary's College of Maryland as a degree-seeking student. Students may request change of catalog year status through the Office of the Registrar under the following conditions:

- 1. Transfer students from a Maryland State public institution of higher education have the option of satisfying St. Mary's College of Maryland graduation requirements that were in effect at the time the student first enrolled at the original institution. These conditions are applicable to a student who has maintained continuous enrollment at a State of Maryland institution of higher education. Continuous enrollment shall be defined as registration for and completion of at least one course per semester in each academic year.
- 2. Students may not move back to any catalog published before their initial enrollment as a degree student. They do have the option of moving to any catalog published after their initial enrollment as a degree-seeking student, but may not move back after having moved forward. Students should be aware that being granted such permission means they are held accountable for the academic requirements in that new catalog. The exception is that if a new minor is introduced in a catalog(s) after their admission to St. Mary's, students follow the requirements for minors in the new catalog, but complete all other graduation requirements of their original catalog, unless they officially move up to the new catalog year. If a student has declared a minor, and the requirements of that minor change, they are required to follow the catalog requirements for the minor of the catalog year in which they were initially enrolled.

Students are reminded that they should check all graduation requirements (major, minor, Core Curriculum, upper division and overall credits) before they decide to elect a change of catalog.

New Wording:

Students are held to the academic requirements of the catalog year in which they enter St. Mary's College of Maryland as a degree-seeking student. However, policies separate from the College's general academic requirements or a student's specific major and minor are determined by the current catalog. Students may request change of catalog year status through the Office of the Registrar under the following conditions:

1. Transfer students from a Maryland State public institution of higher education have the option of satisfying St. Mary's College of Maryland graduation requirements that were in effect at the time the student first enrolled at the original institution. These conditions are applicable to a student who has maintained continuous enrollment at a State of Maryland institution of higher education. Continuous enrollment shall be defined as registration for and completion of at least one course per semester in each academic year.

2. Students may not move back to any catalog published before their initial enrollment as a degree student. They do have the option of moving to any catalog published after their initial enrollment as a degree-seeking student, but may not move back after having moved forward. Students should be aware that being granted such permission means they are held accountable for the academic requirements in that new catalog. The exception is that if a new minor is introduced in a catalog(s) after their admission to St. Mary's, students follow the requirements for minors in the new catalog, but complete all other graduation requirements of their original catalog, unless they officially move up to the new catalog year. If a student has declared a minor, and the requirements of that minor change, they are required to follow the catalog requirements for the minor of the catalog year in which they were initially enrolled.

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