



Science, Technology, Engineering, and Math

Career Information Session





Spotlight on:

Math

Physics

Engineering

Math



Degrees and Certificates

Degrees and Certificates

Associate in Science for Transfer Degree (AS-T) - Mathematics

Many colleges/universities offer bachelor's degrees in this field. Students planning to transfer to a four-year college or university should plan to complete the lower-division major requirements and the general education pattern for the specific transfer institution. SMC has agreements with many UC and CSU campuses, as well as several private and out-of-state institutions.



Academic Planning

For information on the program, assistance creating your educational plan, or exploring options make an appointment with a STEM Counselor:

- <http://smc.edu/student-support/academic-support/counseling/contact.php>

There are different counselors and programs available to serve all needs. We recommend that you see a STEM counselor in addition to other special programs you are a member of. Once on the web page, to schedule an appointment, select the STEM Counseling button.



STEM



Potential Career Options

Job Title	Typical Education	Median Wage
Statistical Assistant	Bachelor's Degree	\$49,870
Actuary	Bachelor's Degree	\$108,350
Financial Analyst	Bachelor's Degree	\$81,590
Economist	Bachelor's Degree	\$105,020
Budget Analyst	Bachelor's Degree	\$76,540
Teacher	Bachelor's Degree and more	\$61,660

For additional career ideas and current salary information, we encourage you reach out to an SMC Career Counselor at the Career Services Center. They can be reached at (310) 434-4337.



Student Resources

- **Math Lab**
Free math tutorial lab services to students in math classes
<http://smc.edu/mathlab>
- **Math Workshops**
Free Math Success Intensives to help our students succeed in Math 2, 3, 7, 11, 13, 15, and 50 classes
<http://smc.edu/student-support/academic-support/counseling/special-support-programs/stem/math-workshops.php>
- **Helpful Math Tools**
Math tutorials and videos, graphing utility tools, interactive pages and forums
<http://smc.edu/academics/academic-departments/mathematics/resources.php>
- **STEM Tutoring**
Stem program has variety of resources that we will cover at the end of the presentation



Campus Resources

- **Math**
 - **Website:** <http://smc.edu/math>
 - **Contact Information:**
Phone: (310) 434-4274

- **STEM Program**
 - **Website:** <http://smc.edu/stem>
 - **Contact Information:**
Phone: (310) 434-43988

- **Career Services Center**
 - **Website:** <http://smc.edu/careercenter>
 - **Contact Information:**
Email: careerservices@smc.edu
Phone: (310) 434-4337



Physics



Degrees and Certificates

Degrees and Certificates

Transfer Preparation Courses

Many colleges/universities offer bachelor's degrees in this field. Students planning to transfer to a four-year college or university should plan to complete the lower-division major requirements and the general education pattern for the specific transfer institution. SMC has agreements with many UC and CSU campuses, as well as several private and out-of-state institutions.



Academic Planning

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- <http://smc.edu/student-support/academic-support/counseling/contact.php>
- **Physics Course Sequence**
 - The physics courses you need to take are based on your major. Speak to an academic counselor to make sure that the sequence you take is appropriate for your goals.
 - <http://smc.edu/academics/academic-departments/physical-sciences/physics/physics-course-descriptions.php>

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STEM



Potential Career Options

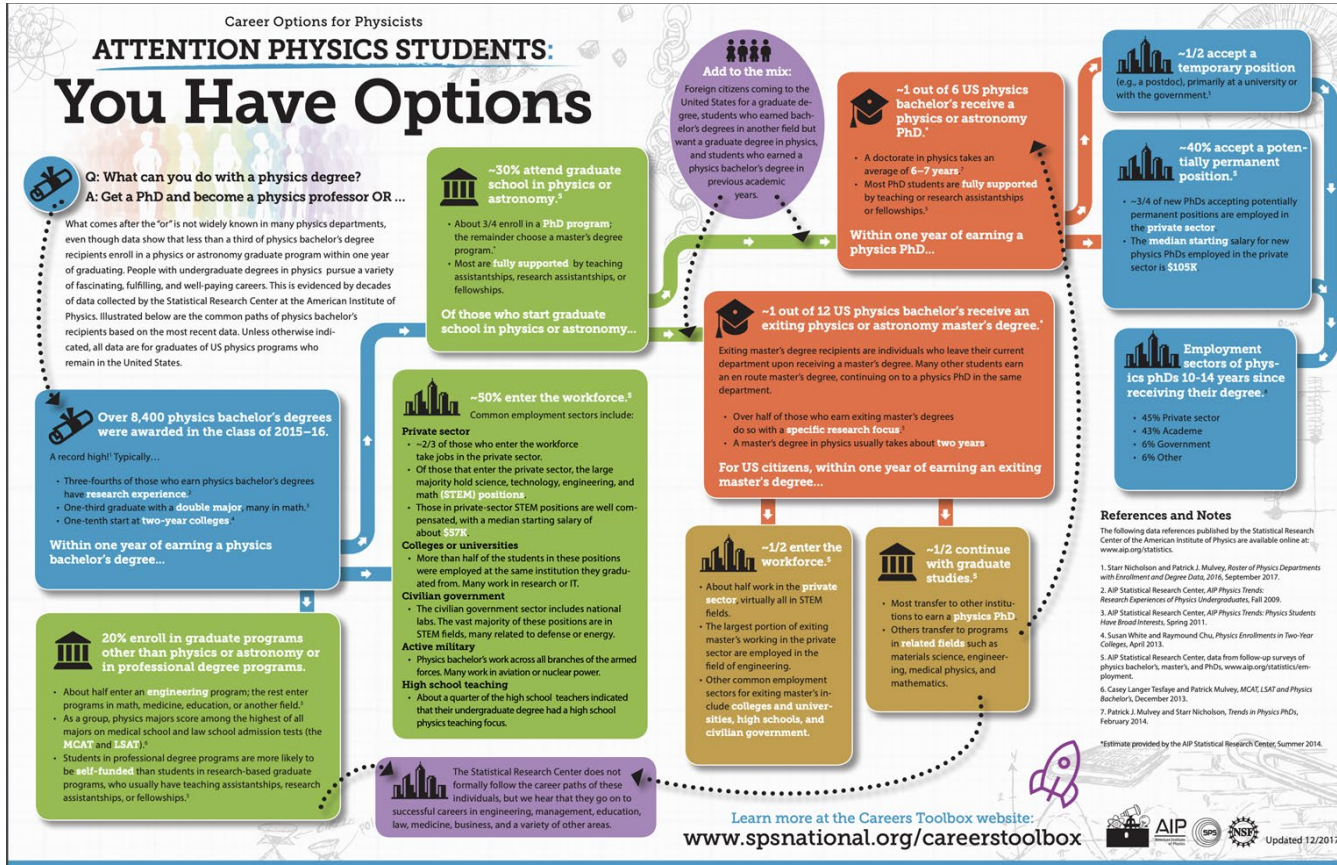
Job Title	Typical Education	Median Wage
Mechanical Engineering	Bachelor's Degree or more	\$88,430
Electrical Engineering	Bachelor's Degree or more	\$101,250
Computational Physicist	Doctoral Degree or More	\$95,000
Research Physicist	Doctoral Degree or More	\$95,391
Medical Physicist	Master's Degree or More	\$128,931
Teacher	Bachelor's Degree or More	\$61,660
Finance	Bachelor's Degree or More	\$85,660
Government Research	Master's Degree or More	\$55,000-\$136,000

What Can You Do with A Physics Degree?

To View This Document:

<https://www.spsnational.org/sites/default/files/sites/default/files/sitewide/career-options-poster%202017.pdf>

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Additional Resources

- **Society of Physics Students: Career Toolbox**
 - The Careers Toolbox focuses on undergraduate physics students to help discover resources and career options.
<https://www.spsnational.org/sites/all/careerstoobox>
- **American Institute of Physics: Employment Data**
 - Provides reports and data on the employment of physicists and astronomers.
<https://www.aip.org/statistics/employment>
- **Society of Physics Students**
 - Society of Physics Students is an a professional association explicitly designed for students to connect with like minded individuals.
<https://www.spsnational.org>



Campus Resources

- **Physics**
 - **Website:** <http://smc.edu/academics/academic-departments/physical-sciences/physics/>
 - **Contact Information:**
Phone: (310) 434-4788
- **STEM Program**
 - **Website:** <http://smc.edu/stem>
 - **Contact Information:**
Phone: (310) 434-43988
- **Career Services Center**
 - **Website:** <http://smc.edu/careercenter>
 - **Contact Information:**
Email: careerservices@smc.edu
Phone: (310) 434-4337



Engineering



Degrees and Certificates

Degrees and Certificates

Associate of Science Degree (AS) - Engineering

Certificate of Achievement - Engineering

Many colleges/universities offer bachelor's degrees in this field. Students planning to transfer to a four-year college or university should plan to complete the lower-division major requirements and the general education pattern for the specific transfer institution. SMC has agreements with many UC and CSU campuses, as well as several private and out-of-state institutions.



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STEM



Potential Career Options

Job Title	Typical Education	Median Wage
Mechanical Engineer	Bachelor's Degree	\$88,430
Electrical Engineer	Bachelor's Degree	\$101,250
Civil Engineer	Bachelor's Degree	\$87,060

For additional career ideas and current salary information, we encourage you reach out to an SMC Career Counselor at the Career Services Center. They can be reached at (310) 434-4337.



Starter Class

- **ENGINEERING 1: Introduction Engineering**

This course is an introduction to the methods and tools of engineering problem solving and design, including the interface of the engineer with society and engineering ethics. While addressing the branches of engineering, the functions of an engineer, and the industries in which engineers work, this course examines the engineering education pathways and explores effective academic strategies.



Student Clubs

- **Office of Student Life - Student Clubs (www.smc.edu/icc)**
 - **Engineering Club**

Allowing students to explore their interests in engineering through various activities and workshops. For more information contact: smcengineerclub11@gmail.com
 - **Robotics Club**

To develop students' interest in Science, Technology, Engineering and Math (STEM) through robotics competitions and other projects. For more information contact: roboticsclub.smc@gmail.com
 - **WISTEM**

To support and promote the success of Women in STEM, with a focus on marginalized women, e.g. women of color, LBT women, disabled, etc. For more information contact: wistem.smc@gmail.com



Campus Resources

- **Engineering Program**
 - **Website:** <http://smc.edu/academics/areas-of-interest/stem/physical-sciences/engineering.php>
 - **Contact Information:**
Phone: (310) 434-4788
- **Professor Tram Dang**
 - **Website:** smc.tramdang.com
- **STEM Program**
 - **Website:** <http://smc.edu/stem>
 - **Contact Information:**
Phone: (310) 434-43988



Campus Resources

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STEM Resources



STEM Resources

- **STEM Program**

Academic support program designed to help traditionally underrepresented students, interested in STEM careers successfully complete their studies at SMC, transfer to a 4-year research-oriented baccalaureate program, and enter the STEM workforce. Programs also has STEM Program reserved courses. For more information and for application deadlines, visit <http://smc.edu/stem>

- **STEM Lab Tutoring**

Free tutoring in select STEM courses. For the tutoring schedule visit <http://smc.edu/student-support/academic-support/counseling/special-support-programs/stem/stem-tutoring.php>

- **Science Learning Resource Center**

Learning facility for Earth, Life, and Physical Sciences students. Students come to do their required Lab Hours in Anatomy, Physiology and Chemistry 10. <http://smc.edu/student-support/academic-support/tutoring-centers/science-lrc.php>



STEM Resources

- **Peer Mentor Support**

Collaborative involvement with fellow students and the STEM/SRI program team

<http://smc.edu/student-support/academic-support/counseling/special-support-programs/stem/peer-mentor-program.php>

- **STEMinars (workshops)**

Workshops designed specifically for STEM students

- **Supplemental Instruction (SI)**

Participate in free sessions involving interactive group activities to help understand course concepts, prepare for exams, and learn effective study skills.

<http://smc.edu/student-support/academic-support/supplemental-instruction/index.php>

- **STEM Counseling**

STEM counselors are available to help you plan your academic goals.

<http://smc.edu/student-support/academic-support/counseling/contact.php>




STEM Program Applying as a New Incoming SMC Student

- **Incoming SMC Student STEM Program Application Requirements**
 - Complete SMC Application and interest in one of the STEM fields
 - Minimum of 2 years of high school science
 - Math 20-ready (Intermediate Algebra or higher)
 - Recommended 2.50 High School GPA
- **Incoming SMC Student STEM Program Dates and Deadlines**
 - The application is typically available in May and the deadline to apply is in May
 - <http://smc.edu/student-support/academic-support/counseling/special-support-programs/stem/sri-application-information.php>
- **STEM Program Mailing/Interest Card**
 - <http://smc.edu/student-support/academic-support/counseling/special-support-programs/stem/science-research-initiative.php>



STEM Program Applying as a Current SMC Student

- **Currently Enrolled SMC Student STEM Program Application Requirements**
 - Math 20-ready (Intermediate Algebra or higher)
 - 2 years of Science Research Initiative (SRI) program commitment
 - Interest in one of the STEM fields
 - Planned enrollment in Math and Science courses
- **Currently Enrolled SMC Student STEM Program Dates and Deadlines**
 - Application typically available in May and the deadline to apply is in May
 - <http://smc.edu/student-support/academic-support/counseling/special-support-programs/stem/sri-application-information.php>
- **STEM Program Mailing/Interest Card**
 - <http://smc.edu/student-support/academic-support/counseling/special-support-programs/stem/science-research-initiative.php>



Don't forget to explore the additional videos on Programs and Careers in STEM

- **Astronomy**
- **Geography**
- **Geology**
- **Automotive Technology**
- **Environmental Science**
- **Sustainable Technologies**
- **Chemistry**
- **Biological Science**
- **General Science**
- **Computer Science**
- **Computer Programming**
- **Cyber Security, Networking**
- **Cloud Computing, Web and Mobile Development**