



# Science, Technology, Engineering, and Math

## Career Information Session





Spotlight on:

Biological Science

Chemistry

General Science



# Biological Science



# Degrees and Certificates

## Degrees and Certificates

### Coursework for Transfer Preparation

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.



## Potential Career Options

<b>Job Title</b>	<b>Typical Education</b>	<b>Median Wage</b>
<b>Physician's Assistant</b>	<b>Doctoral Degree</b>	<b>\$112,260</b>
<b>Food Science Technician</b>	<b>Associate's Degree or higher</b>	<b>\$42,840</b>
<b>Toxicologist</b>	<b>Bachelor's Degree</b>	<b>\$76,351</b>
<b>Genetic Counselor</b>	<b>Master's Degree</b>	<b>\$91,410</b>
<b>Prosthetists/Orthotist</b>	<b>Master's Degree</b>	<b>\$95,000</b>
<b>Biochemist</b>	<b>Doctoral Degree</b>	<b>\$94,490</b>
<b>Biological technician</b>	<b>Bachelor's Degree</b>	<b>\$45,860</b>



# 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**



## Starter Course

- **BIOLOGY 21: Cell Biology and Evolution**

This is the first course of a three-course lecture and laboratory sequence for Biology majors, including Biology 21, 22, and 23. It describes how scientists approach the scientific method to generate scientific knowledge; studies the history, evidence, and mechanisms of evolution; identifies the chemistry of four classes of macromolecules; elucidates the cell principle including cell structure, function, and physiology; describes general energy metabolism; and illustrates the processes of growth and reproduction through mitosis, meiosis, development, and life cycles. Students are required to perform at least two experiments that require data collection, computer-based data management and graphing, and scientific analysis and interpretation of data. The course is designed to meet the needs of students transferring to upper division biology study.



# Student Clubs

- **Office of Student Life - Student Clubs ([www.smc.edu/icc](http://www.smc.edu/icc))**
  - **Pre-Health Professional Club**

Open to anyone interested in pre-med, pre-dentistry, or healthcare careers. Club activities include regular speakers from many of these fields, participation in a variety of volunteer activities, and a variety of social events. For more information contact, [smcpha@gmail.com](mailto:smcpha@gmail.com)





# Campus Resources

- **Biological Science**
  - **Website:** <http://smc.edu/academics/areas-of-interest/stem/life-sciences/biological-sciences.php>
  - **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 Info:**  
Email: [careerservices@smc.edu](mailto:careerservices@smc.edu)  
Phone: (310) 434-4337



# Chemistry



# Degrees and Certificates

## Degrees and Certificates

### Coursework for Transfer Preparation

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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**STEM**



## Potential Career Options

Job Title	Typical Education	Median Wage
Chemical Engineer	Bachelor's Degree	\$96,980
Research Chemist	Doctoral Degree	\$78,790
Pharmaceutical Research	Doctoral Degree	\$113,343
Academic Research	Doctoral Degree	\$54,411
Biochemist	Doctoral Degree	\$94,490

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

- **CHEMISTRY 9: Everyday Chemistry**

This course fulfills the general education requirements for a laboratory science course. Students who successfully complete this course will understand basic chemical principles and how these principles relate to the Earth's natural systems and cycles, with emphasis on humanity's impact on Earth's natural environments. Students will gain a scientific understanding of the impact of human activity on natural systems and sustainability. Students will also learn common laboratory techniques, including the safe handling of chemicals and the proper use of laboratory equipment, as they analyze environmental problems and solutions.



## Student Clubs

- **Office of Student Life - Student Clubs ([www.smc.edu/icc](http://www.smc.edu/icc))**
  - **Chemistry Club**

Provides opportunities to participate in field trips to chemistry labs and organizations to increase awareness of the relevance of chemistry in society. For more information contact, [chemclubofsmc@gmail.com](mailto:chemclubofsmc@gmail.com)



## Campus Resources

- **Chemistry Department**
  - **Website:** <http://smc.edu/chemistry>
  - **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 Info:**  
Email: [careerservices@smc.edu](mailto:careerservices@smc.edu)  
Phone: (310) 434-4337





# General Science



# Degrees and Certificates

## Degrees and Certificates

### **Associate of Arts (AA) - General Science**

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
Health Careers	Varies	\$TBD
Agricultural and Food Science Technician	Associate's Degree	\$41,230
Chemical Technician	Associate's Degree	\$49,260
Biotechnician	Bachelor's Degree	\$45,860
Environmental Scientist	Bachelor's Degree	\$71,360

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 Clubs

- **Office of Student Life - Student Clubs ([www.smc.edu/icc](http://www.smc.edu/icc))**
  - **Pre-Health Association (PHA)**

Open to anyone interested in pre-nursing/allied health as well as pre-med/pre-dent, etc. Club activities include regular clinician speakers from many of these fields, participation in a variety of volunteer activities, and a variety of social events. For more information contact, [smcpha@gmail.com](mailto:smcpha@gmail.com)
  - **Chemistry Club**

Provides opportunities to participate in field trips to chemistry labs and organizations to increase awareness of the relevance of chemistry in society. For more information contact, [chemclubofsmc@gmail.com](mailto:chemclubofsmc@gmail.com)



# Campus Resources

- **General Science**
  - **Website:** <http://smc.edu/academics/areas-of-interest/stem/interdepartmental-studies/general-science.php>
- **STEM Program**
  - **Website:** <http://smc.edu/stem>
  - **Contact Information:**  
Phone: (310) 434-43988
- **Career Services Center**
  - **Website:** <http://smc.edu/careercenter>
  - **Contact Info:**  
Email: [careerservices@smc.edu](mailto:careerservices@smc.edu)  
Phone: (310) 434-4337



# 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**
- **Math**
- **Physics**
- **Engineering**
- **Computer Science**
- **Computer Programming**
- **Cyber Security, Networking**
- **Cloud Computing, Web and Mobile Development**