

QUALITY ASSURANCE: Measurement Science Option Bachelor of Science (First-Time Freshman 4-year Roadmap)

The purpose of the degree roadmap is to serve as a guide for planning one's academic coursework required to complete a specific major semester by semester. **The roadmap is subject to change and is NOT to be considered a replacement for advisement with an academic advisor.** Students who choose majors that require a minor should take this into consideration when customizing their own academic plan. *See reverse side for additional information.*

Entry Level Skills Tests:

ENGLISH

EPT Waiver: SAT I 550, ACT 24, AP 3 or EAP
000-141 ENG 088 & ENG 099
142-150 ENG 099
151 ENG 110

MATH

ELM Waiver: SAT I & II 550, ACT 23, AP 3 or EAP
00-40 MAT 3
42-48 MAT 9
50 G.E. Math

<u>Course</u>	<u>Title</u>	<u>Units</u>	<u>Course</u>	<u>Title</u>	<u>Units</u>
<u>First Semester:</u>			<u>Second Semester:</u>		
GE A1*	Freshman Composition I	3	GE A1*	Freshman Composition II	3
GE D4*	Perspectives on U.S. and California Government area	3	BIO 120	Principles of Biology (GE B2*)	3
GE B4*	Quantitative Reasoning (MAT 131)	3	BIO 121	Principles of Biology Lab (GE B3*)	1
CHE 110	General Chemistry I	5	GE D2*	Global & Historical Perspectives area	3
<u>Third Semester:</u>			<u>Fourth Semester:</u>		
GE D3*	Perspectives on U.S. History area	3	GE A3*	Oral Communication area	3
GE C2*	Humanities - Art Courses area	3	GE E*	The Whole Person area	3
GE A2*	Logic/Critical Reasoning area	3	GE C1*	Humanities area	3
GE B1*	Physical Sciences area	3	GE D1*	Perspectives on Individuals, Groups & Society area	3
<u>Fifth Trimester:</u>			<u>Sixth Trimester:</u>		
GE F3/G*	Studies in Social Science area/Cultural Pluralism area	3	QAS 325	Technical Communications	4
QAS 200	Fundamentals of Quality	3	QAS 220	Fundamentals of Measurement	3
QAS 330	Statistical Quality Control & Inspection	3	PHY 130	Elements of Physics I	3
MAT 191	Calculus I	5	MAT 193	Calculus II	5
GWAR	ENG 350 or GWE	0-3	<u>Eighth Trimester:</u>		
<u>Seventh Trimester:</u>			<u>Tenth Trimester:</u>		
GE F1*	Studies in the Humanities area	3	QAS 332	Electrical Metrology	3
QAS 350	Physical Metrology	3	QAS 340	Measurement Uncertainty	3
QAS 347	Dimensional Metrology	3	QAS 427	Quality Improvement	3
PHY 132	General Physics II	5	<u>Ninth Trimester:</u>		
QAS 445	Systems Failure Analysis	3	QAS 445	Systems Failure Analysis	3
QAS 450	Value Based Quality	3	QAS 450	Value Based Quality	3
QAS 498	Directed Research	3	QAS 498	Directed Research	3
					Total Units: 123

* See reverse side for General Education (GE) course requirements.

** A minimum of 120 units are required for completion of degree.

See University Catalog for information on the Graduate Writing Assessment Requirement (GWAR)

Faculty

Rodger Hamrick, Program Advisor
M.B.A., California State University, Dominguez Hills

Career Options

The demand for individuals with industry-specific technical, management and team-based problem-solving skills is increasing as developments in science and technology advance. A degree in Quality Assurance is extremely versatile and provides graduates with many career options.

Graduates can work in the private industry or the public sector, in areas such as: pharmaceutical or biomedical companies, software companies, the food industry, manufacturing, hospitals and healthcare settings, schools, government agencies, and the military. Quality Assurance professionals are generally members of a senior corporate team in areas such as product management, design engineering, manufacturing engineering, materials management, service and healthcare.

NOTE: Occasionally, courses listed on the roadmaps may be offered in only specific semesters or on an as needed basis. Students are strongly urged to refer to the University Catalog, Class Schedule, or consult with an academic advisor each semester to ensure that they are progressing toward graduation in as timely a manner as possible. Please contact the program office for further information: (310) 243-3880.

***General Education (GE) Requirements**

A. Basic Skills:

Courses must be passed with a grade of "C" or higher.
GE A1: ENG 110, ENG 111 (both required)
GE A2: PHI 120 or PSY 110
GE A3: THE 120
GE A4: CSC 101 or LIB 150 (optional category)

B. Area of the Natural Sciences and Quantitative Reasoning:

Select one course from each category below.
GE B1: CHE 102, EAR 100, GEO 200, PHY 100
GE B2: ANT 101 or BIO 102
GE B3: BIO 103 or EAR 101
GE B4: MAT 105, 131, 153, 171, 191

C. Area of the Humanities:

Select one course from each category below.
In categories 2 and 3, select courses from different departments.
GE C1: HUM 200
GE C2: ART 100, ART 101, COM 130, DAN 130, MUS 101, MUS 110, THE 100, THE 160
GE C3: AFS 200, AFS 231, APP 101, CHS 100, ENG 230, FRE 220, HUM 212, PHI 101, PHI 102, SPA 151, SPA 221

D. Area of the Social Sciences:

Select one course from each category below.
In categories 1 and 2, select courses from different departments.
GE D1: AFS 212, ANT 100, PSY 101, SOC 101, SOC 102
GE D2: ANT 102, GEO 100, HIS 120, HIS 121, POL 100
GE D3: HIS 101
GE D4: POL 101

E. Objectives for Lifelong Learning and Self-Development

Select one course from the following.
GE E: HEA 100, HSC 201, KIN 235, REC 100, UNV 101

F. Upper Division Integrative Studies:

Select one course from each category. Courses in this category are to be taken after 60 semester units and ALL lower division General Education courses have been completed.
GE F1: HUM 310, 312, 314
GE F2: SMT 310, 312, 314, 416
GE F3: SBS 316, 318**
GE F4: Students may select a course from this category to satisfy one or more of the upper division G.E. requirements from F1-F3 courses above.

G. Cultural Pluralism Requirement:

Within their General Education selections or within other requirements, all students must take one course which addresses cultural pluralism (i.e. the impact of the integration of cultures).
GE G: ANT 312, 336, 337, 338, 339, 340, 342, 389, CHS 300, HIS 305, MUS 401, PHI 383, SBS 318, SOC 322, SOC 331, SOC 383

**SBS 318 satisfies both F3 and G areas. Students will receive only three units credit, but will have met both requirements.