CHEMISTRY, BS, CONCENTRATION IN MANAGEMENT AND MARKETING

Natural Sciences, Mathematics, and Engineering (nsme) (https://catalog.csub.edu/general-information/csub-information/school-natural-sciences-mathematics-engineering/)

Department of Chemistry and Biochemistry (https://catalog.csub.edu/general-information/csub-information/school-natural-sciences-mathematics-engineering/department-chemistry-biochemistry/)

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Office: Science Building II, 273
Phone: (661) 654-2030
Email: chemistry@csub.edu
www.csub.edu/Chemistry (http://www.csub.edu/Chemistry/)

Program Maps for Natural Sciences, Mathematics, and Engineering (https://programmap.csub.edu/academics/interest-clusters/4e942a6e-b8e4-4b60-a1ae-334235acc581/)

Program Requirements

Academic Regulations
A grade of “C” in chemistry, cognate, and all other major/minor courses is the minimal grade acceptable for progression into subsequent chemistry courses and for graduation. Students who fail to achieve at least a “C” may repeat the course. If a course is satisfactorily completed, the prior unsatisfactory grade will no longer bar a student from continuing in the Chemistry program. Credit, no-credit courses are not acceptable for the major or minor.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tr>
<td></td>
<td>General Education Requirements</td>
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<tr>
<td>First-Year Seminar (FYS)</td>
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<tr>
<td>Lower Division Area A: Foundational Skills</td>
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<tr>
<td>Lower Division Area B: Natural Sciences</td>
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<tr>
<td>Lower Division Area C: Arts and Humanities</td>
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<td>Lower Division Area D: Social and Behavioral Sciences</td>
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<tr>
<td>Lower Division Area E: Student Enrichment and Lifelong Learning (SELF)</td>
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<td>Lower Division Area F: Ethnic Studies</td>
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<td>American Institutions: Government and History</td>
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<tr>
<td>Junior Year Diversity &amp; Reflection (JYDR)</td>
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<td>Graduation Writing Assessment Requirement (GWAR)</td>
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<td>Upper Division Thematic Area C and D</td>
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<td>General Education Capstone</td>
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<td>Major Requirements</td>
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<td>Lower Division</td>
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CHEM 1000 Foundations of Chemistry                  3
CHEM 1001 Foundations of Chemistry Laboratory       2
CHEM 1100 Foundations of Analytical Chemistry       2
CHEM 1600 Foundations of Physical Chemistry         2
CHEM 2110 Foundations of Quantitative Chemical Analysis | 3
CHEM 2200 Foundations of Inorganic Chemistry        2
or CHEM 2240 Foundations of Bioinorganic Chemistry   |
CHEM 2300 Foundations of Organic Chemistry          3
CHEM 2400 Foundations of Biochemistry               2
CHEM 2900 Research Methods in Chemistry              2

Upper Division
CHEM 3110 Advanced Quantitative Chemical Analysis   3
CHEM 3300 Intermediate Organic Chemistry            3
CHEM 3301 Organic Chemistry Laboratory I            2
CHEM 3600 Physical Chemistry: Thermodynamics and Kinetics | 3
CHEM 3610 Physical Chemistry: Quantum and Statistical Mechanics | 3

CHEM 3908 Seminar in Chemical Literature            3
CHEM 4100 Chemical Separations                      1
CHEM 4101 Chemical Separations Laboratory           1
CHEM 4200 Inorganic Chemistry                       3
CHEM 4908 Senior Seminar in Chemistry               3

Cognates
Mathematics
Select one of the following: 8

MATH 2010 & MATH 2020 Calculus for the Biological and Chemical Sciences I and Calculus for Biological & Chemical Sciences II
MATH 2310 & MATH 2320 Single Variable Calculus I for Engineers and Single Variable Calculus II for Engineers
MATH 2510 & MATH 2520 Single Variable Calculus I and Single Variable Calculus II

Physics
Select one of the following: 8

PHYS 2110 & PHYS 2120 College Physics I and College Physics II
PHYS 2210 & PHYS 2220 Physics for Scientists and Engineers I and Physics for Scientists and Engineers II

Concentration in Management and Marketing

MGMT 3000 Organizational Behavior                    3
MGMT 3100 Human Resource Management                  3
MKTG 3000 Marketing Principles                       3

Elective Courses
Select one of the following focus areas (patterns are just suggestions): 6

Management Focus
MGMT 3090 Career and Managerial Skills
MGMT 4300 Negotiation, ADR, and Conflict Management

Logistics/Operations Focus
MGMT 3020 Introduction to Operations Management
MKTG 4060 Marketing Channels

Marketing/Sales Focus:
MKTG 3010 Consumer Behavior
MKTG 3020  Advertising & Public Relations

<table>
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<th>Major Subtotal</th>
<th>77</th>
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<td>Additional Units Needed Towards Graduation</td>
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| Total Units | 119-120 |

1. The minimum GPA for these 77-78 units is 2.0
2. Satisfies Area B1
3. Satisfies Area B4
4. Satisfies Area B1/B3
5. Satisfied in major or cognate
6. The SELF requirement is met by completing a LD Area C, or D course with a SELF component.
7. Can be satisfied by exam.