



**University of Hawai'i at Mānoa**  
**Colleges of Arts & Sciences Program Sheet 2015-2016**  
**Bachelor of Science (BS) in Chemistry**  
**Admissions: Open Process: Declaration**  
**Min. Total Credits: 120 (97 in core & major + 23 in electives)**

<b>UHM General Education Core Requirements</b>
<b>Foundations</b>
<input type="checkbox"/> FW ENG 100, 100A, 190, or ESL 100
<input type="checkbox"/> FS MATH 241, 251A
<input type="checkbox"/> FG (A / B / C)
<input type="checkbox"/> FG (A / B / C)
<b>Diversification</b>
<input type="checkbox"/> DA / DH / DL
<input type="checkbox"/> DA / DH / DL
<input type="checkbox"/> DB
<input type="checkbox"/> DP CHEM 161, 162, 272, 273
<input type="checkbox"/> DY CHEM 161L, 162L, 272L, 273L
<input type="checkbox"/> DS
<input type="checkbox"/> DS
<i>* See degree, college and major requirements for courses that can also fulfill these.</i>
<b>UHM Graduation Requirements</b>
<b>Focus</b>
<input type="checkbox"/> H
<input type="checkbox"/> E (300+)
<input type="checkbox"/> O (300+)
<input type="checkbox"/> W
<input type="checkbox"/> W
<input type="checkbox"/> W
<input type="checkbox"/> W (300+)
<input type="checkbox"/> W (300+)
<b>Hawaiian / Second Language</b>
<input type="checkbox"/> 101
<input type="checkbox"/> 102
<input type="checkbox"/> 201
<input type="checkbox"/> 202
<b>Credit Minimums</b>
• 120 total applicable
• 30 in residence at UHM
• 35 non-introductory/25 upper division (300+ level) credits
<b>Grade Point Average</b>
• 2.0 cumulative or higher ( <i>Note: Other GPAs may be required.</i> )
• Good academic standing

<b>Degree Requirements</b>
<b>Bachelor of Science Requirements</b>
<input type="checkbox"/> Calculus I
<input type="checkbox"/> Calculus II
<input type="checkbox"/> Chemistry I with lab
<input type="checkbox"/> Chemistry II with lab
<input type="checkbox"/> Physics I with lab
<input type="checkbox"/> Physics II with lab
<i>Refer to major requirements for the specific courses that satisfy these requirements.</i>
<b>College Requirements</b>
<b>Credit Maximums</b>
• 8 KRS activity
• 9 Directed Reading / Research
• 12 Practicum / Internship

*This program sheet was prepared to provide information and does not constitute a contract. See back for major requirements.  
 Meet regularly with your major advisor.*

## Major Requirements for BS in Chemistry

Admission: Open

Application: NA

Min. major credits: 41 (57 with related requirements)

Min. C grade (not C-) in prerequisite CHEM courses

### Requirements

#### Chemistry Related Requirements (16 credits)

CHEM 161\*<sup>DP</sup> /  161L\*<sup>DY</sup> (C, not C-, or higher to advance)

CHEM 162\*<sup>DP</sup> /  162L\*<sup>DY</sup> (C, not C-, or higher to advance)

MATH 241\*<sup>FS</sup> or 251A\*<sup>FS</sup>

MATH 242 or 252A

#### Chemistry Core Courses (41 credits in CHEM courses numbered 200 and above)

CHEM 272\*<sup>DP</sup> /  272L\*<sup>DY</sup> (C, not C-, or higher to advance)

CHEM 273\*<sup>DP</sup> /  273L\*<sup>DY</sup>

CHEM 274 /  274L (offered Spring only)

CHEM 351 (offered Fall only)

CHEM 352 /  352L (offered Spring only)

Biochemistry (CHEM 372<sup>DB</sup> or BIOC 441<sup>DB</sup> or BIOL/MBBE/PEPS 402<sup>DB</sup>)

CHEM 425 /  425L (offered Fall only)

CHEM 427 (offered Spring only)

CHEM 445 /  445L (offered Spring only)

MATH 243 or 253A (C, not C-, or higher to advance)

PHYS 170\*<sup>DP</sup> /  170L\*<sup>DY</sup>

PHYS 272\*<sup>DP</sup> /  272L\*<sup>DY</sup> (C, not C-, or higher to advance)

Min. **3 credits** from: CHEM 399, 601, 602, 622, 641, 642, 643, 651, 652, 653, or 657

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*Recommended electives: MATH 244 and PHYS 274*

*Recommended language: German or French*

*Note: Please consult with your Chemistry advisor regarding minimum grade and GPA requirements and projected changes to course offerings.*

### Notes

Chemistry Department: Bilger 239; (808) 956-7480; chemdept@hawaii.edu; manoa.hawaii.edu/chem  
Chemistry Undergraduate Chair: Kristin Kumashiro, PhD; (808) 956-7480; kumashir@hawaii.edu