Critical Requirements: Students who follow the 2008-2009 catalog year and are entering ASU as either a first-time freshman or transfer from any Arizona public university or Arizona community college must complete critical requirements.

\begin{tabular}{|c|c|c|c|c|c|}
\hline \& \& \& \multicolumn{2}{|l|}{Completed ATP: \(\square\) Yes \(\quad \square\) No} \& Completed AGEC: \(\square\) Yes \(\square\) No \\
\hline Course Subject and Title (courses in bold/shading are critical) \& Hrs. \& Upper
Division \& Transfer Course/Grade \& \[
\begin{aligned}
\& \text { Minimum Grade if } \\
\& \text { Required } \\
\& \hline
\end{aligned}
\] \& Additional Critical Requirement Notes \\
\hline \multicolumn{6}{|l|}{TERM ONE: 0-15 CREDIT HOURS} \\
\hline ASU 101: The ASU Experience \& 1 \& \(\square\) \& \& \& \multirow[t]{4}{*}{\begin{tabular}{l}
- ASU 101 is for freshman ASU students only. Not required for transfer students. \\
- An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses \\
- *Mathematical Studies (MA) designation approval pending \\
- Complete at least 2 critical courses each with a minimum grade of C. Suggested courses for term 1: APM 270; CST 100, CST 150 \\
- Students must complete either a Physics (PHY \(111 / 113\) \& 112/14) OR Chemistry (113 and 115) sequence \\
- Minimum cumulative 2.5 GPA required for all critical (bold/shaded) courses \\
- Minimum cumulative 2.0 GPA required
\end{tabular}} \\
\hline \begin{tabular}{l}
Complete 2 courses from: \\
MA course: (APM 265: Mathematics of Change I *) \\
APM 266: Mathematics of Change II \\
CST 100: Object-Oriented Software Development \\
CST 150: Digital Systems I (CS) \\
CST 200\& 201: Object-Oriented Software Development \\
II/Laboratory ( \(\mathbf{3} / \mathbf{1} \mathbf{~ h r s}\) ) \\
MAT 243: Discrete Mathematical Structures \\
PHY 111/113: General Physics/Laboratory (SQ) or CHM 113: \\
General Chemistry I (SQ) \\
CST 230: Applied Data Structures
\end{tabular} \& \begin{tabular}{l}
3 \\
3 \\
3 or \\
3/1
\end{tabular} \& \(\square\)
\(\square\)
\(\square\)
\(\square\) \& \& \begin{tabular}{l}
Grade of C \\
Grade of C \\
Grade of C
\end{tabular} \& \\
\hline ENG 101 or 102: First-Year Composition or ENG 105: Advanced First-Year Composition or ENG 107 or 108: English for Foreign Students \& 3 \& \(\square\) \& \& Grade of C \& \\
\hline Humanities, Fine Arts \& Design (HU) \& 3 \& \(\square\) \& \& \& \\
\hline \multicolumn{6}{|l|}{TERM TWO: 16-30 CREDIT HOURS} \\
\hline \begin{tabular}{l}
Complete 2 additional courses from: \\
MA course: (APM 265: Mathematics of Change I *) \\
APM 266: Mathematics of Change II \\
CST 100: Object-Oriented Software Development \\
CST 150: Digital Systems I (CS) \\
CST 200\& 201: Object-Oriented Software Development \\
II/Laboratory ( \(\mathbf{3} / \mathbf{1} \mathbf{~ h r s )}\) \\
MAT 243: Discrete Mathematical Structures \\
PHY 111/113: General Physics/Laboratory (SQ) or CHM 113: \\
General Chemistry I (SQ) \\
CST 230: Applied Data Structures
\end{tabular} \& 3

3 or

$3 / 1$ \& $\square$ \& \& | Grade of C |
| :--- |
| Grade of C | \& \multirow[t]{3}{*}{| - Complete at least 2 additional critical courses each with a minimum grade of C. Suggested courses for term 2: APM 271; CST 200 \& 201 |
| :--- |
| - Students must complete either a Physics (PHY $111 / 113$ \& 112/14) OR Chemistry (113 and 115) sequence |
| - Minimum cumulative 2.5 GPA required for all critical (bold/shaded) courses |
| - Minimum cumulative 2.0 GPA required |} \\

\hline CST 250/251: Microcomputer Architecture \& Programming/Lab \& 3/1 \& $\square$ \& \& \& \\
\hline ENG 101 or 102: First-Year Composition or ENG 107 or 108: English for Foreign Students or ENG 105: Advanced First-Year Composition \& 3 \& $\square$ \& \& Minimum grade of C required \& \\
\hline \multicolumn{6}{|l|}{TERM THREE: 31-45 CREDIT HOURS} \\

\hline | Complete 2 additional courses from: |
| :--- |
| MA course: (APM 265: Mathematics of Change I *) |
| APM 266: Mathematics of Change II |
| CST 100: Object-Oriented Software Development |
| CST 150: Digital Systems I (CS) |
| CST 200\& 201: Object-Oriented Software Development |
| II/Laboratory ( $\mathbf{3} / \mathbf{1} \mathbf{~ h r s )}$ |
| MAT 243: Discrete Mathematical Structures |
| PHY 111/113: General Physics/Laboratory (SQ) or CHM 113: |
| General Chemistry I (SQ) |
| CST 230: Applied Data Structures | \& 3

\[
$$
\begin{gathered}
3 \text { or } \\
3 / 1 \\
\hline
\end{gathered}
$$

\] \& $\square$ \& \& | Grade of C |
| :--- |
| Grade of C | \& \multirow[t]{4}{*}{| - First-year composition requirement must be completed by end of term 3 |
| :--- |
| - Complete at least 2 additional critical courses each with a minimum grade of C. Suggested courses for term 3: MAT 243; PHY 111 \& 113 or CHM 113 |
| - Students must complete either a Physics (PHY 111/113 \& 112/14) OR Chemistry (113 and 115) sequence |
| - Minimum cumulative 2.5 GPA required for all critical (bold/shaded) courses |
| - Minimum cumulative 2.0 GPA required |} \\

\hline APM 294: Mathematics of Change III \& 3 \& $\square$ \& \& \& \\
\hline CST 220 Programming Languages for Technology with C/C++ \& Scripting \& 3 \& $\square$ \& \& \& \\
\hline CST 386 Operating Systems Principles \& 3 \& 区 \& \& \& \\
\hline \multicolumn{6}{|l|}{TERM FOUR: 46-60 CREDIT HOURS} \\

\hline | Complete remaining courses from: |
| :--- |
| MA course: (APM 265: Mathematics of Change I *) |
| APM 266: Mathematics of Change II |
| CST 100: Object-Oriented Software Development |
| CST 150: Digital Systems I (CS) |
| CST 200\& 201: Object-Oriented Software Development II/Laboratory ( $\mathbf{3} / 1 \mathrm{hrs}$ ) |
| MAT 243: Discrete Mathematical Structures |
| PHY 111/113: General Physics/Laboratory (SQ) or CHM 113: |
| General Chemistry I (SQ) |
| CST 230: Applied Data Structures | \& 3

$$
\begin{gathered}
3 \text { or } \\
3 / 1 \\
\hline
\end{gathered}
$$ \& $\square$

$\square$

$\square$ \& \& | Grade of C |
| :--- |
| Grade of C | \& \multirow[t]{5}{*}{| - Complete remaining critical courses each with a minimum grade of C. Suggested courses for term 4: CST 230 |
| :--- |
| - Students must complete either a Physics (PHY 111/113 \& 112/14) OR Chemistry (113 and 115) sequence |
| - Minimum cumulative 2.5 GPA required for all critical (bold/shaded) courses |
| - Minimum cumulative 2.0 GPA required |} \\

\hline CST 359 Internet Networking Protocol \& 3 \& 区 \& \& \& \\

\hline Choose 1 from: PHY 112 General Physics AND PHY 114 General Physics Lab OR CHM 115 General Chemistry with Qualitative Analysis (SQ) \& $$
\begin{gathered}
3 / 1 \\
\text { or } 4 \\
\hline
\end{gathered}
$$ \& $\square$ \& \& \& \\

\hline ECN 211 Macroeconomic Principles (SB) \& 3 \& $\square$ \& \& \& \\
\hline Social \& Behavioral Science (SB) AND Cultural Awareness in the US (C), Global Awareness (G) or Historical Awareness (H) \& 3 \& $\square$ \& \& \& \\
\hline
\end{tabular}

Critical Requirements：Students who follow the 2008－2009 catalog year and are entering ASU as either a first－time freshman or transfer from any Arizona public university or Arizona community college must complete critical requirements．

Major Map：Applied Computer Science－Bachelor of Science（B．S．）
College of Technology and Innovation，Polytechnic Campus Catalog Year：2008－2009

| Course Subject and Title （courses in bold／shading are critical） | Hrs． | $\begin{aligned} & \hline \text { Upper } \\ & \text { Division } \end{aligned}$ | Transfer Course／Grade | Minimum Grade if Required | Additional Critical Requirement Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TERM FIVE：61－75 CREDIT HOURS |  |  |  |  |  |
| APM 301 Introductory Statistics（CS） | 3 | 区 |  |  |  |
| CST 315 Software Enterprise I：Tools \＆Process | 3 | 区 |  |  |  |
| CST 420 Foundations of Distributed Web－based Applications in Java | 3 | 囚 |  |  |  |
| CST 433 Database Technology | 3 | 区 |  |  |  |
| Technical elective | 3 | $\square$ |  |  |  |
| TERM SIX：76－90 CREDIT HOURS |  |  |  |  |  |
| CST 316 Software Enterprise II：Construction \＆Transition | 3 | 区 |  |  |  |
| CST 355 Applications of Computer Theory | 3 | 区 |  |  |  |
| CST 400－level course | 3 | 区 |  |  |  |
| Literacy and Critical Inquiry（L） | 3 | $\square$ |  |  |  |
| Humanities，Fine Arts \＆Design（HU）AND Cultural Diversity in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | $\square$ |  |  |  |
| TERM SEVEN：91－105 CREDIT HOURS |  |  |  |  |  |
| CST 415 Software Enterprise III：Inception \＆Elaboration（L） | 3 | 区 |  |  |  |
| CST 496 Ethics and Professionalism in Computing | 1 | 区 |  |  |  |
| CST 400－level course | 3 | 区 |  |  |  |
| Technical elective | 3 | $\square$ |  |  |  |
| Lab Science | 4 | $\square$ |  |  |  |
| TERM EIGHT：106－120 CREDIT HOURS |  |  |  |  |  |
| CST 416：Software Enterprise IV：Project \＆Process Management （L）＊＊or <br> TWC 400：Technical Communications（L） | 3 | ® |  |  | ＊＊Literacy（L）designation approval pending |
| CST 400－level course | 3 | 区 |  |  |  |
| CST 400－level course | 3 | 区 |  |  |  |
| Technical Elective | 3 | $\square$ |  |  |  |
| Upper division Humanities（HU）AND Cultural Awareness in the US （C），Global Awareness（G）or Historical Awareness（H）OR Upper division Social Behavioral Science（SB）AND Cultural Awareness in the US（C），Global Awareness（G）or Historical Awareness（H） | 3 | 区 |  |  |  |

## Graduation Requirements Summary：

| Total Hours（120 <br> minimum） | Total Hrs at ASU（30 <br> minimum） | Hrs Resident Credit for <br> Academic Recognition <br> $(56$ minimum $)$ | Major GPA（2．000 <br> Min．） | Total UD Hrs（45 <br> minimum） | Total Comm．College <br> Hrs．（64 maximum） |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

## General University Requirements：Legend

－General Studies Core Requirements：
Literacy and Critical Inquiry（L）
Mathematical Studies（MA）
Computer／Statistics／Quantitative applications（CS）
Humanities，Fine Arts，and Design（HU）
－Social and Behavioral Sciences（SB）
－Natural Science－Quantitative（SQ）
－Natural Science－General（SG）
－General Studies Awareness Requirements
－Cultural Diversity in the US（C）
－Global Awareness（G）
－Historical Awareness（H）
－First Year Composition

## Additional Notes：

