









## 2022 - 2023 Major Map

### Technological Leadership, BS

School/College: The College of Liberal Arts and Sciences  
LATECLDRBS

Term 1 0 - 16 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
AME 240: Introduction to Physical Computing OR HDA 296:  Creative Futures: Studio OR IPI 241: Designing and Making for an Interplanetary Future	3	C	<ul style="list-style-type: none"> <li>Consult with your academic advisor to select the appropriate Making Pathway course (AME 240, HDA 296, or IPI 241); see Course Lists/Track Groups section below for more Making Pathway details.</li> <li>Students interested in the Interplanetary + SpaceWorks Making Pathway and/or graduate work should enroll in MAT 265 or MAT 270.</li> <li>ASU 101 or college-specific equivalent First-Year Seminar required of all first-year students.</li> <li>Select your <b>Career Interest Communities</b> and play <b>me3@ASU</b>.</li> </ul>
 IPI 196: Fundamentals of Inquiry	3	C	
ENG 101: First-Year Composition or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107: First-Year Composition or ENG 108: First-Year Composition	3	C	
LIA 101: Student Success in The College of Liberal Arts and Sciences	1		
MAT 251: Calculus for Life Sciences (MA) OR MAT 265: Calculus for Engineers I (MA) OR MAT 270: Calculus with Analytic Geometry I (MA)	3-4	C	
PSY 101: Introduction to Psychology (SB)	3	C	
Term hours subtotal:	16-17		
Term 2 16 - 32 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
AME 240: Introduction to Physical Computing OR HDA 296:  Creative Futures: Studio OR IPI 241: Designing and Making for an Interplanetary Future	3	C	<ul style="list-style-type: none"> <li>Consult with your academic advisor to select the appropriate Making Pathway course (AME 240, HDA 296, or IPI 241); see Course Lists/Track Groups section below for more Making Pathway details.</li> <li>Create a first draft <b>resume</b>.</li> <li>Join a <b>student club</b> or professional organization.</li> </ul>
 IPI 296: Inquiry (L) OR HUL 250: Introduction to Interdisciplinary Research (HU or SB)	3	C	
ENG 101: First-Year Composition or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107: First-Year Composition or ENG 108: First-Year Composition	3	C	
Humanities, Arts and Design (HU) AND Global Awareness (G)	3		
Natural Science - Quantitative (SQ) OR Natural Science - General (SG)	4		
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	16		
Summer 2 32 - 44 Credit Hours	Hours	Minimum Grade	Notes
IPI 484: Internship	6	Y	
Humanities, Arts and Design (HU) AND Historical Awareness (H)	3		
Elective	3		
Term hours subtotal:	12		
Term 3 44 - 62 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes

⚠ AME 330: Digital-Physical Systems OR HDA 496: Creative Futures: Advanced Studio OR IPI 441: Advanced Designing and Making for an Interplanetary Future OR SES 307: Space Works I OR SES 407: Space Works II	3	C
⚠ IPI 496: Advanced Inquiry	3	C
AME 230: Programming for the Media Arts (CS) OR CSE 110: Principles of Programming (CS)	3	C
STP 226: Elements of Statistics (CS)	3	C
Science and Society Elective	3	C
Cultural Diversity in the U.S. (C)	3	
⚠ Complete Mathematics (MA) requirement.		
Complete First-Year Composition requirement.		
Term hours subtotal:	18	

- Consult with your academic advisor to select the appropriate Making Pathway course (AME 330, HDA 496, IPI 441, SES 307, or SES 407); see Course Lists/Track Groups section below for more Making Pathway details.

Term 4 62 - 78 Credit Hours Critical course signified by ⚠	Hours	Minimum Grade	Notes
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⚠ AME 330: Digital-Physical Systems OR HDA 496: Creative Futures: Advanced Studio OR IPI 441: Advanced Designing and Making for an Interplanetary Future OR SES 307: Space Works I OR SES 407: Space Works II	3	C
⚠ IPI 496: Advanced Inquiry	3	C
COM 230: Small Group Communication (SB)	3	C
PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)	4	C
WPC 300: Problem Solving and Actionable Analytics	3	C
Term hours subtotal:	16	

- Consult with your academic advisor to select the appropriate Making Pathway course (AME 330, HDA 496, IPI 441, SES 307, or SES 407); see Course Lists/Track Groups section below for more Making Pathway details.
- Develop your professional online presence.

Summer 4 78 - 90 Credit Hours	Hours	Minimum Grade	Notes
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IPI 484: Internship	6	Y
Literacy and Critical Inquiry (L)	3	
Elective	3	
Term hours subtotal:	12	

Term 5 90 - 105 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
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★ AME 330: Digital-Physical Systems OR HDA 496: Creative Futures: Advanced Studio OR IPI 441: Advanced Designing and Making for an Interplanetary Future OR SES 307: Space Works I OR SES 407: Space Works II	3	C
★ IPI 496: Advanced Inquiry	3	C
PSY 302: The Psychology of Positive Leadership	3	C
Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)	3	
Upper Division Literacy and Critical Inquiry (L)	3	
★ Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).		
Term hours subtotal:	15	

- Consult with your academic advisor to select the appropriate Making Pathway course (AME 330, HDA 496, IPI 441, SES 307, or SES 407); see Course Lists/Track Groups section below for more Making Pathway details.
- Use Handshake to research employment opportunities.

Term 6 105 - 120 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
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★ AME 330: Digital-Physical Systems OR HDA 496: Creative Futures: Advanced Studio OR IPI 441: Advanced Designing and Making for an Interplanetary Future OR SES 307: Space Works I OR SES 407: Space Works II	3	C
★ IPI 496: Advanced Inquiry	3	C

- Consult with your academic advisor to select the appropriate Making Pathway course (AME 330, HDA 496, IPI 441,

FIS 432: Problem Solving Through Strategic Thinking	3	C
LSE 305: Conceptualizing Learning: Theories in Practice	3	C
Upper Division Science and Society Elective	3	C
Term hours subtotal:	15	

SES 307, or SES 407); see Course Lists/Track Groups section below for more Making Pathway details.

- Apply for **full-time career opportunities**.

- All students pursuing a B.S. or B.S.P. degree in The College of Liberal Arts and Sciences must complete two courses from the Science and Society list found at <https://thecollege.asu.edu/resources/science-society>. At least one of the two courses must be upper-division and students must earn a C or better in the courses. Both Science and Society courses (i.e., all six credits) may count towards any major, minor, related fields, and ASU General Studies requirements.
- **Selecting a Making Pathway:** In consultation with an assigned academic advisor, students must select and complete a Making Pathway from one of the four options listed below. Each Making Pathway requires the completion of 6 lower-division credit hours and 12 upper-division credit hours. Please note that some Making Pathways require multiple completions of the same course to fulfill these credit hour requirements.

#### Hide Course List(s)/Track Group(s)

<b>Design Making Pathway</b> Complete two semesters of: <b>HDA 296: Creative Futures: Studio</b> Complete four semesters of: <b>HDA 496: Creative Futures: Advanced Studio</b>	<b>Design + Creative Engineering Making Pathway</b> Complete: <b>AME 240: Introduction to Physical Computing</b> <b>AME 330: Digital-Physical Systems</b> <b>HDA 296: Creative Futures: Studio</b> Complete three semesters of: <b>HDA 496: Creative Futures: Advanced Studio</b>	<b>Interplanetary Making Pathway</b> Complete two semesters of: <b>IPI 241: Designing and Making for an Interplanetary Future</b> Complete four semesters of: <b>IPI 441: Advanced Designing and Making for an Interplanetary Future</b>
<b>Interplanetary + SpaceWorks Making Pathway</b> Complete two semesters of: <b>IPI 241: Designing and Making for an Interplanetary Future</b> Complete two semesters of: <b>IPI 441: Advanced Designing and Making for an Interplanetary Future</b> Complete: <b>SES 307: Space Works I</b> <b>SES 407: Space Works II</b>		

#### Notes:

- **First-Year Composition:** All students are placed in ENG 101 unless submission of SAT, ACT, Accuplacer, IELTS, or TOEFL score, or college-level transfer credit or test credit equivalent to ASU's first-year composition course(s), determine otherwise. Students on Polytechnic, Downtown Phoenix and West Campuses are encouraged to complete the Directed Self-Placement survey to choose the first-year composition option they believe best suits their needs. Visit: <https://cisa.asu.edu/DSP>
- **Mathematics Placement Assessment** score determines placement in first mathematics course.

Please keep in mind that the applicability of a specific transfer course toward an ASU degree program depends on the requirements of the department, division, college or school in which you are enrolled at ASU. Transfer agreements that guarantee the completion of university level requirements do not necessarily meet college and major requirements. Please consult with an advisor for more information.

**Total Hours:** 120

**Upper Division Hours:** 45 minimum

**Major GPA:** 2.00 minimum

**Cumulative GPA:** 2.00 minimum

**Total hrs at ASU:** 30 minimum

**Hrs Resident Credit for**

**Academic Recognition:** 56 minimum

**Total Community College Hrs:** 64 maximum

**Total College Residency Hrs:** 12 minimum

### **General University Requirements Legend**

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Arts and Design (HU)
- Social-Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed next to courses on the major map were valid for the 2022 - 2023 academic year. Please refer to the course catalog for current General Studies designations at time of class registration. General Studies credit is applied according to the designation the course carries at the time the class is taken.