

**VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY**  
**College of Architecture, Arts, and Design**  
**School of Design**  
**Pathways Minor in Design + Technology + Creative Expression**  
**For students entering under UG Catalog 2023-2024**

The Pathways Minor in Design + Technology + Creative Expression requires completion of 18 credit hours. This minor prepares students to work in a creative and collaborative high tech environment with outcomes across disciplines and in support of understanding, exploring, and materializing a self directed capstone. At least 6 credits should be taken at the 3000-level or above. Students should select electives that are in disciplines not associated with student major. A minimum minor GPA of 2.0 in all courses taken to fulfill the minor is required. The interdisciplinary coursework is as follows:

**REQUIRED COURSES – 9 credits**

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<b>IDS 1114</b>	Play to Make (Pathways 6a, 6d, 11)	3	_____
<b>MUS 3064</b>	Digital Sound Manipulation	3	_____
<b>AAD 4234</b>	Capstone Collaboration: Cross-disciplinary Teamwork Capstone Component (Pre: IDS 1114)	3	_____
<b>Total Credits for Section:</b>			<b>9</b>

**ELECTIVES – 9 credits minimum**

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<b>Choose 3 credits of the following from Understand (Empathize/Define)</b>		3	_____
<b>CINE 2054</b>	Introduction to Cinema (Pathways 2, 10)		
<b>COMM 2084</b>	Media and Society (Pathways 10)		
<b>CS 3724</b>	Introduction to Human-Computer Interaction		
<b>HIST/SOC/STS 2604</b>	Introduction to Data in Social Context (Pathways 2, 5f, 10, 11)		
<b>IDS 2114</b>	History of Industrial Design (Pathways 6a)		
<b>IDS 2124</b>	History of Industrial Designers (Pathways 6d)		
<b>ITDS 1114</b>	Design Appreciation (Pathways 6a, 6d, 10, 11)		
<b>MUS 3314</b>	Linux Laptop Orchestra (Pathways 6a, 10)		
<b>STS 1504</b>	Intro to Science, Technology and Society (Pathways 2, 3, 11)		
<b>STS 3284</b>	Technology and Disability (Pathways 2, 6d, 10)		

**Choose 3 credits of the following from Explore (Ideate/Prototype)**

3 \_\_\_\_\_

- AHRM 2014**            Design for Consumers  
(Pathways 6d, 11)  
(Pre: AHRM 1014)
- CS 1014**             Introduction to Computational Thinking  
(Pathways 5f, 10)
- CS 1064**             Introduction to Programming Python  
(Pathways 5f, 10)
- ENGE 2094**          CREATE! Ideation for Innovation  
(Pathways 6d, 11)
- ENGL 2744**          Intro to Creative Writing  
(Pathways 1a, 6a, 6d, 11)  
(Pre: ENGL 1106 or ENGL 1204H or COMM 1016)
- HUM 2204**          The Creative Process  
(Pathways 6a, 11)
- TA 2204**             Creative Dance  
(Pathways 6a, 6d, 11)
- IDS 3224**            Topics in Design Competencies (variable credit courses)

**Choose 3 credits of the following from Materialize (Test/Implement)**

3 \_\_\_\_\_

- CS 3744**             Introduction to GUI Programming  
(Pre: 2114, (MATH 1114 or MATH 1114H or MATH 2114 or  
MATH 2114H), (MATH 1224 or MATH 1224H or MATH 2204  
or MATH 2204H))
- COMM 3274**        Social Dimensions of Games, Simulations, and Virtual  
Environments
- IDS 2044**          Human Factors (Pre: ARCH 1016)
- MKTG 3104**        Marketing Management (Pre: Jr. Standing)
- MUS 4014H**        Topics in Advanced Electroacoustic Research  
(Pre: MUS 3066, MUS 3164)
- SOC 2104**        Quantitative Approaches to Community Research  
(Pathways 5f, 10)  
(Cross-listed with HD 2104)
- TA 2404**            Intro to Applied Collaborative Techniques  
(Pathways 1a, 6a, 6d, 11)

**Total Credits for Section:** **9**

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**Pathways Minor in Design + Technology + Creative Expression Total Credits:** **18**

**Pathways Core Concepts:**

- 1f =Foundational Discourse
- 1a = Advanced/Applied Discourse
- 2 = Critical Thinking in the Humanities
- 3 = Reasoning in the Social Sciences

4 = Reasoning in the Natural Sciences

5f = Foundational Quantitative and Computational Thinking

5a = Advanced/Applied Quantitative and Computational Thinking

6a, 6d, or 6a,6d (either) = Critique and Practice in Design and the Arts

7 = Critical Analysis of Identity and Equity in the United States

**Pathways Integrative Concepts:**

10 = Ethical Reasoning

11 = Intercultural and Global Awareness