

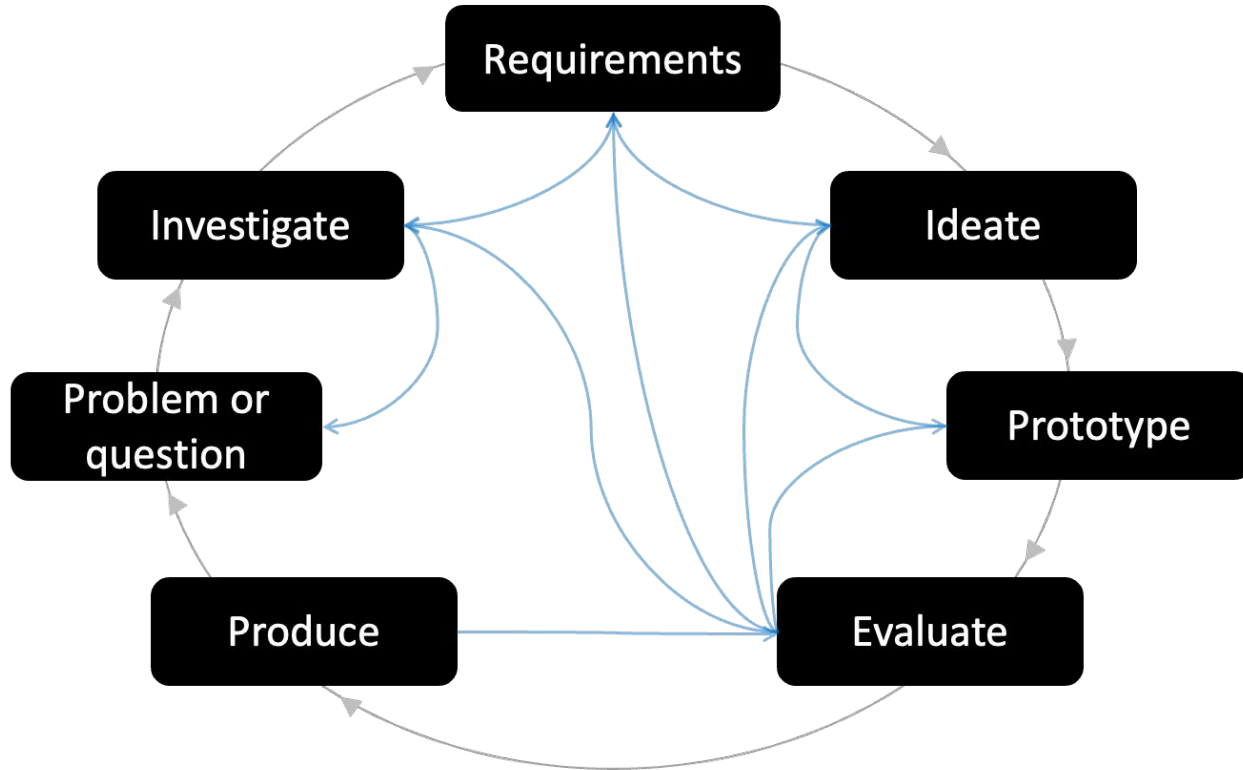
# **TECHIN 520: Launch Studio Planning**

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# 3 Types of Launch Projects

1. Industry Sponsored
2. Faculty Led
3. Student Led (with mentorship from industry/faculty)

# Launch Project: Project Phases



# Launch 1 -Activities and Focus



## Investigate

Gates 1 and 2: Assess and Uncover foundational knowledge (what do we already, know what already exists) and determine primary research focus

Activities: secondary/desk research; primary research planning, competitive analysis, technical exploration, stakeholder, market analysis

## Requirements

Gate 3 and 4: Complete research, synthesize research into set of goals and requirements to drive concept development and early prototyping

Activities: synthesis of secondary and primary research, ideation, prototype and evaluation planning, lean business canvas

## Ideate/Prototype

Gate 5: Concept filtering, prioritization. Early user experience and technical component/subsystem prototypes and evaluation planning

Activities: iterative prototyping evaluation, and refinement for both user experience and product function in parallel

# Launch 2 Activities and Focus

## Prototype

Gates 6: Concept and system design refinement: User Evaluation

Activities: iterative prototyping; evaluation of product concept and UI; developing functional requirements and technical prototyping for functional testing

## Evaluate-Test-Iterate

Gates 7 - 10: Functional Proof of Concept Requirements and Testing:

Activities: prototyping, user and functional evaluation, developing product function requirements, metrics, testing and refinement

## Finalize and Present

Working Proof of Concept, function, and business requirements: project summary presentation

Activities: concept refinement

# Launch Project Autumn '25 & Winter '26 Schedule

| Autumn 2025     |  |                  |                   |                                | Winter 2026  |   |  |   |                                | Final<br>Presentation<br>+ Poster<br>Session |
|-----------------|--|------------------|-------------------|--------------------------------|--|---|--|---|--------------------------------|--|
| G1              | G2                                     | G3               | G4                | G5                             | G6   | G7  | G8   | G9  | G10                            |  |
| Problem Context | Stakeholders /User Scenarios Use Cases | Primary Research | Synthesis Concept | Prototyping and Eval/Test Plan | Prototyping present user eval plan plus results of pilot testing | Results and recommendations of first round of user eval | Declaring plan for functional prototyping and demo including tech pipeline and how to connect Front End and Back End, plus tech contribution | Critical Functional Prototype Design Review | Final Working Proof of Concept |  |

# Course Objectives

Apply methods and skills learned from previous course work to your Launch Project:

- > Design Thinking Approach
- > Analyze business goals/market and understand the benefit to the business
- > HW/SW technical development and prototyping

Learn and practice:

- > Professional level of effective group work
- > Project management
- > Communication in interdisciplinary teams and with external industry sponsors and mentors

# Course Format

- > Applied, project and team based learning: applying concepts, methods, approach to address a real world, constrained problem and develop a solution that achieves constructive business, technical and customer outcomes
- > Combination of targeted lectures, demonstrations, presentations, and consultation with faculty advisor(s)
- > Deliverables across project management and communications; technical development, user research, design, and business analysis and modeling



# Course Format (Cont'd)

Parallel Workflow:

- > Project Management
- > User Research Plan
- > Concept Development
- > Business Goals/Strategy
- > Prototyping (Functional/Technical and UX)

# Activities and Deliverables

- > 5 Project Gates aligned with product development process (each gate is meant to inform the next gate)
- > Both team and individual assignments contributing to each gate
- > 2 Presentations (Mid-quarter and Final)
- > Peer and Team Evaluations at each Gate
- > Project Management: Weekly Project Reports (send to Faculty and Sponsor)
- > Budget Management: team CFO
- > Team Peer Advisor Groups

# Launch Project Video Examples



Improving Eyedrop Self-Administration for Individuals  
with Motor and/or Visual Disabilities

Team: Ruiqing Wang, Leo Peng, Sam Wong, Jassie He  
Sponsors: Jennifer Mankoff, Shwetak Patel



# Potential Launch Project Sponsors

1. Microsoft
2. T-Mobile
3. Ai2
4. King County Metro (KCM)
5. UW-Applied Physics Lab (APL)

Also, in talks with **Meta**, **Vaisala**, and multiple **robotics** and **IoT** startups.

# **Student Led Launch Projects**

# Student Led Project Success

1. Well scoped topic that is aligned with MSTI
2. Identify Subject Matter Expert (SME) and external mentorship
3. Building off an existing body of emerging technology and research or evidence based problem space
4. Interdisciplinary team

# Student Led Launch Project Proposals

- > Suggested topic areas that are meaningful opportunities for applications of emerging technologies in HW/SW, or Robotics
- > Priority will be given to project proposals submitted by teams, rather than individuals
- > **Schedule a MANDATORY office hour session to review your concept/proposal with John prior to May 30, 2025**
- > Deadline to submit: **End of day May 30 project proposal (submit on TECHIN520 canvas site)**
- > Submit project definition deck on **June 6 2025**

# Proposal Prompts

- > In a slide deck, please address the following prompts to introduce you project:
- > What is the problem area and why is it important?
  - You must have a definable problem space with evidence (why this is a problem and who is a problem for - intended users, what leads you to believe there is a market for this? )
- > How would you frame an initial investigation into this problem space? What secondary research would you explore to better understand the experiences and needs for intended users?
  - Would you have access to investigate user and or stakeholder needs directly
- > What are the existing solutions? Who are the current precursors, benchmarks, competitors?
- > What technologies do you believe would be important to consider /explore in the space?
- > Are there existing relevant data sets or would you need to collect initial data?