Hacking 4 Defense

Evolving Technology
Entrepreneurship at UCF

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The Growing Impact of Innovation & Technology Entrepreneurship at UCF

UCF/CECS Impact
- Applied Innovation
- Entrepreneurial Training
- National Economic Impact

Founders Academy
- Senior Design Programs: Pilot: Fall 2017
- CECS Masters Degree Capstone Courses: Spring 2018
- Continuing Education
- Corporate Programs: Spring 2018
- MSDA: Spring 2018
- H4D: Debuted: Spring 2020

Solving Critical Defense Problems
- Student Experience
- DoD Connections
- Agile Problem Solving

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- Applied Innovation
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UCF/CECS Impact
- Applied Innovation
- Entrepreneurial Training
- National Economic Impact
Innovation & Invention

Unique Market Disruption
- Defining Value Proposition
- Competitive Analysis
- Finding Global Market Disruptions

Direct Customer Verification
- Direct Customer Interviews
- Value Proposition Verification
- Business Model Definition
- Venture Capital Engagement

"Start-up Team" Formation

Real-world Customer Engagement

Business Model Creation
### Applying the BMC to Mission Based Problems

**Mission Model Canvas**

<table>
<thead>
<tr>
<th>Key Partners</th>
<th>Key Activities</th>
<th>Value Proposition</th>
<th>Buy-in &amp; Support</th>
<th>Beneficiaries/ Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which of these activities can your company outsource to others?</td>
<td>What are the <em>unique</em> activities your company needs to deliver the value proposition?</td>
<td><em>For each beneficiary</em> what is their value proposition?</td>
<td><em>For each beneficiary</em> how does the team get “Buy-In”?</td>
<td>By title/function who are the individuals we are creating value for?</td>
</tr>
<tr>
<td>Key Resources</td>
<td></td>
<td>Which of these activities does your company needs to own?</td>
<td>Deployment</td>
<td>What is their archetype</td>
</tr>
<tr>
<td>Which of these activities does your company needs to own?</td>
<td></td>
<td></td>
<td><em>What will it take to deploy the MVP to widespread use?</em></td>
<td></td>
</tr>
<tr>
<td>Mission Budget (or cost)</td>
<td>Mission Achievement/Success (or “fulfillment” or “impact”) Factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What are the costs to deliver the value proposition?</td>
<td>For each beneficiary how does the team know they succeeded?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Leveraging Lean Startup and Design Thinking to Solve Critical Defense Problems**
Giving Students Real-world Defense Start-up Experience

In-class Curriculum
- Solve a Critical High-Tech Defense Problem as a Focused Team
- Define the Business Strategy thru Customer Validation
- Get Comfortable Navigating the DoD Customer Base

Pitch to Venture Capital
- Communicate Ideas Succinctly
- Learn to Handle Investor Questions
- Learn to Compete for funding

Create a Start-up Firm
- Learn the Pace
- Live the Culture
- Experience the Strategy

Student Outcomes
- Learn They Can Be Defense Entrepreneurs
- Learn to Apply Innovation to Needs
- Learn to Lower the Risk of Starting up

Students Walk Away with Life-long Skills
J. Oscar Rodriguez, 2016 ©
H4D@UCF Spring 2021

Who Said That?

- 61 Applicants from across University
- 18 students chosen, 3 teams
- 6 graduates / 12 undergraduates
- 6 different majors
- All problems from US Navy NAWCTSD

Network Modeling

Team Aquila

- Taught as COP 4932/5937
- Special Topics course approved at College & University level at both UG/Grad level
- Will teach again as ST in Spring 22
- Plan on permanent course starting Spring 23
We Need DAB Help to Execute the Plan...

Corporate Sponsorship
• Advice on Important Defense Problems
• Access to Corporate Rolodexes for Team Interviews
• Team Mentors Who Can Provide Insight & Business Savvy
• Career Advice for Students Interested in Defense Roles
Thank You

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