Course Title: Building a Successful Business with The Internet of Things  
Course Code: BUS 20  
Instructor: Sudha Jamthe, CEO IoT Disruptions and IoT Author and Technology Futurist  

Course Summary:  
The Internet of Things (IoT) connects everyday objects such as thermostats, toothbrushes, and T-shirts to the Internet. For example, fitness trackers have become a part of our dress code, tracking health and exercise patterns and empowering us to take charge of our health. Connected objects are creating a big shift in consumer behavior and offer new innovation opportunities for entrepreneurs to build businesses in wearables, digital health, the connected home, smart cars, and smart cities. The transformative power of IoT is disrupting existing industries such as toys, medical, auto, home appliances, insurance, retail, factories, and ad tech. This course will take a case study approach and teach entrepreneurs and product managers how to build a new IoT business from a technology idea and how to extend an existing business into new markets. Students will learn a new framework to design IoT products, create value from IoT data, and scale IoT businesses successfully in Consumer and B2B industries. Confirmed guest speakers include business leaders from Google, IBM and Venture Capitalists and Entrepreneurs who will share best practices in building successful IoT businesses. At the end of the course, students will have the opportunity to present a business plan to apply their learning.  

Confirmed Guest Speakers Include:  
Mark Spates, Head of Product, Google Home  
SkyBell CEO Andrew Thomas  
John Mattison, Assistant medical director, Kaiser Permanente  
Robert Schwentker, Founder, Blockchain University  
Gayathri Magie, IBM Watson System Leader, IBM  
Ashwin Ram, Conversation AI, Amazon Alexa  
Thomas Serval, CEO, Kolibree  
Anupam Rastogi, Nokia Venture Partners  
Jen Tong, Google Cloud Platform  

Grade Options and Requirements:  
• Letter Grade (A, B, C, D, No Pass)  
  ○ All assignments will be graded on a completed / not completed basis  
    • Class Participation 30%  
    • Business Case Study 70%  

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• Credit/No Credit (CR/NC)
  o A passing grade (for "Credit") = at least 70% of expectations accomplished
• No Grade Requested (NGR)
  o This is the default option. No work will be required; no credit shall be received; no proof of attendance can be provided.

*Please Note: If you require proof that you completed a Continuing Studies course for any reason (for example, employer reimbursement), you must choose either the Letter Grade or Credit/No Credit option. Courses taken for NGR will not appear on official transcripts or grade reports.

Weekly Outline:

The classes are a mix of lectures with industry case studies and visits from guest speakers who are entrepreneurs, venture capitalists, business leaders from Google, Venture Capitalists, IBM, Amazon and IoT startup CEOs. The case studies examples shared will be adapted to the students background to cover the industries of their interest and to help them build out a successful IoT Business as entrepreneurs or to lead the transformation in their companies.

Every lesson of this class is setup to help students understand the IoT ecosystem and best business practices to leave with confidence to build a successful IoT Business big or small.

Class Dates are on Tuesdays April 4 to June 6th 2017

Week 1: April 4 - INTRODUCTION

Students will get an overview of what to expect during this course and get introduced to the Internet of Things (IoT). They will be introduced to the Business Framework we will use weekly that will help them to take a technology idea and build an IoT Business.

Lecture Topics:
  1. Class Introductions and Course Overview
  2. Sneak Peak of the IoT Business Framework to be used throughout the course.

Week 2: April 11 Intrepreneurship & Entrepreneurship (Part 1)

Guest Speaker: Thomas Serval, CEO Kolibree

IoT covers a wide spectrum of applications and is now a catchall phrase for new AI technologies. Learn the IoT plus AI application spectrum and how to create a new business or extend an existing business.

Lecture Topics:
2. What are the questions to ask when you start building out an IoT from an Idea to a Device keeping the business focus on what customer problem you are solving for?
3. What does it take to scale a company in growth stage upwards of $25Mil in IoT/AI space?

Week 3: April 18 Technology Idea to IoT Product to Business

**Guest Speaker:** Jen Tong, Google Cloud Platform

**Lecture Topics:**
1. IoT Business Framework
2. Learn the challenges and best practice to build an end-to-end IoT and connect to the cloud, navigating incompatibilities.

Week 4: April 25 - IoT Customer Experience: Building an IoT Product

**Guest Speaker** - Mark Spates, Head of Product, Google Home

**Lecture Topics:**
1. Building a new IoT business
3. Understanding BOM (Bill of Material), Scaling & Pricing strategies.
4. How to iterate IoT hardware to build an IoT Product

Week 5 May 02 and Week 6 May 09 - IOT DATA + AI LEADING to COGNITIVE IOT

For two weeks, students will be introduced to data and its effective utilization for IoT. They will be introduced to exposing value from Data in IoT product experiences and introduced to Machine Learning (as it relates to IoT value creation). Industry analysis customized to student’s backgrounds will be shared.

**May 2nd Guest Speaker** - Gayathri Magie Srinivasan of IBM Watson IoT Team.
**May 09th Guest Speaker** - Ashwin Ram, Conversation AI, Amazon Alexa

**Lecture Topics:**
1. Different type of IoT data and what strategic value can they offer for different industries?
2. How do you create value in IoT using Data?
3. Data Science and IoT - An Introduction to Value Creation and Machine Learning

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4. IoT Data in different Scenarios - city, industrial, retail, Fintech and evolution of AI.

Week 7 May 16: Understanding the Ecosystem Business

**Guest Speaker: Anupam Rastogi, Nokia Venture Partners**

**Lecture Topics:**

Week 8: May 23: Intrepreneurship & Entrepreneurship (Part 2)

**Guest Speaker** - CEO and co-founder SkyBell, Andrew Thomas

**Lecture Topics:**
1. Building out an IoT Business from Idea to Scale
2. IoT Ecosystem & Funding Scenarios
3. Industry Analysis (Case studies continues)

Week 9: May 30: IoT Industry Analysis

**Guest Speaker (Digital Health) - John Mattison, Assistant medical director, Kaiser Permanente**

**Guest Speaker (FinTech) - Robert Schwnetker, Blockchain University**

Analysis of two key IoT impacted industries with opportunities.

**Lecture Topics:**
1. Digital Health and Wearables
2. Robots & Drones AI Business
3. Retail Beacons
4. Insurance and Connected Cars
5. FinTech (Blockchain)

Week 10: Jun 6: FINAL CLASS BUSINESS PLAN PRESENTATION

**Guest Panel of Judges:** A set of Venture Capitalists (TBC)

Some students may choose to present their business plan as teams and get feedback.

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