# **Technology Strategy and Product Management**

Track Curriculum<sup>1</sup>

Technologies have become pervasive and fundamental to the operation of modern businesses. These technologies are at the core of today's knowledge-based economy, fueling the development of innovative products, services and business processes. Developing great high-technology products and services, however, requires more than just technical excellence. Technology leaders also need a deep understanding of business fundamentals and of how to integrate novel technologies, business processes and market forces together to create successful products and services.

The Technology Strategy and Product Management MBA Track emphasizes strategic and management issues relevant to the development, application, and management of cutting-edge technologies. Utilizing the strengths of Carnegie Mellon's #1 ranked School of Computer Science, the track provides students a foundation in technology issues related broadly to hardware and software industries, as well as delivers knowledge in Financial Technology, High-Tech Healthcare, Mobile Apps, Internet of Things, and Robotics.

MBA Graduates of this track are exceptionally prepared to address the complex issues that lie at the intersection of business and technology. They are trained to lead their future organizations in developing and executing technology strategies and managing technology projects.

## Who Should Apply?

The Technology Strategy and Product Management Track prepares students who aspire to senior positions in firms ranging from Product Manager and Technology Consultant to ultimately VP of Products, Chief Technology Officer, Chief Information Officer, and Chief Executive Officer.

Students enrolling in the track must have an undergraduate degree in Computer Science, Engineering, or have comparable work experience in the high-technology sector.

### **Faculty Coordinator**

#### **Tim Derdenger**

Associate Professor of Marketing and Strategy

**o** 412-268-9812

w cmu.edu/tepper

#### **Carnegie Mellon University**

Tepper School of Business 5000 Forbes Avenue Pittsburgh, PA 15213

#### **Required Track Courses**

| 45-985 | Product Management for and by PMs Semester Course            |
|--------|--|
| 45-833 | New Product Management (aka: Zero to One Product Management) |
| 45-872 | Technology Strategy  |
| 45-984 | Technology Strategy and Product Management Capstone          |

<sup>&</sup>lt;sup>1</sup> Note: course offerings may vary from year to year.

| HCI for PMs                 | 45-868 | Design Thinking for Organizational Transformation       |
|-----------------------------|--------|---|
| (Choose one)                | 05-863 | Intro to Human Computer Interaction for Technology Exec |
|                             |        |   |
| Tech. Management            | 45-807 | Commercialization and Innovation: Strategy              |
| (Choose one)                | 45-805 | Lean Entrepreneurship                                   |
|                             | 45-882 | Digital Marketing and Social Media Strategy             |
|                             | 45-936 | Marketing Analytics                                     |
|                             | 45-951 | Marketing Research                                      |
|                             | 45-809 | Science of Growth                                       |
|                             | 45-848 | Ethics and AI   |
|                             | 45-952 | Pricing   |
|                             |        |   |
| <b>Data Science for PMs</b> | 45-952 | End-to-End Business Analytics                           |
| (Choose one)                | 45-881 | Modern Data Management                                  |
|                             | 46-886 | Machine Learning Fundamentals                           |
|                             | 46-887 | Machine Learning for Business                           |
|                             | 46-889 | Business Value Through Integrative Analytics            |
|                             | 45-851 | Data Mining   |
|                             | 45-885 | Data Visualization                                      |
|                             |        |   |
| Optional Tech Courses       |        |   |
|                             | 95-874 | Agile Methods   |
|                             | 05-834 | Applied Machine Learning                                |
|                             | 95-891 | Intro to Artificial Intelligence                        |
|                             | 05-617 | Designing AI Products and Services                      |
|                             | 15-619 | Cloud Computing   |
|                             | 53-604 | Production Leadership                                   |
|                             | 17-781 | Mobile and IoT Computing Services                       |
|                             | 95-891 | Introduction to Artificial Intelligence                 |
|                             | 17-645 | Software Engineering for AI-Enabled Systems             |
|                             | 11-624 | Human Language for Artificial Intelligence              |

| 05-617 | Design of AI Products and Services                                  |
|--------|---|
| 49-713 | Designing for the Internet of Things (or 95-733 Internet of Things) |
| 51-828 | Design Center: Design for Digital Systems                           |
| 49-710 | Product Design Thinking and Practice                                |
| 05-610 | User-Centered Research & Evaluation                                 |