

2021 MSBA Practicum Projects FAQ

We welcome you to the 2021 UC Davis Master of Science in Business Analytics Practicum Project application process. This document will lay out what is required to propose an analytics project for your organization to work with UC Davis MSBA students and faculty.

What is the UC Davis Master of Science in Business Analytics Program?

Launched in Fall 2017, the UC Davis MSBA program is a one-year program focused on developing high-performance professionals who can create business value from data and models. Its guiding principle is that sustainable business value is created by professionals with the perspective to ask the right business questions, the technical chops to deploy the right data science tools, and the managerial savvy to lead organizational change. This program is located in San Francisco, the heart of the Big Data revolution.

What is the UC Davis MSBA Practicum Project?

Our program revolves around a company-focused collaboration, in which a team of 5-7 MSBA students works with the firm over a 10-month period. The team of students are supervised by a group of faculty and industry mentors. The objective is to learn by integrating and applying a cross-section of analytics skills to a real business problem. The typical project involves 1,500+ hours of student effort on analytics data and machine learning work focused on (largely) client-specified problems.

The expectation for the student team is to traverse the entire lifecycle of a real-world project, starting with environmentally-savvy tasks scoping and requirements analysis and ending in a persuasive pitch to partner executives on the value of the outcomes, which may include deliverables such as fully functioning prototypes, data architectures, statistical models and algorithms, dashboards, or web-based decision support tools.

What are the characteristics of a great practicum project?

A typical MSBA project is an initiative that the partner organization considers important, but one that may not be urgent enough to qualify for internal resources in the near-term.

Projects use data, technology, and algorithms to examine something of value to the organization, either an ongoing business process (e.g., "develop and implement algorithms that optimize weekly promotions to consumers while incorporating mobile app-provided data about location and spending habits"), or a one-time activity (e.g., "where should the organization locate its next distribution center").

Techniques used may be span descriptive analytics (e.g., understanding how consumer-specific and product-related attributes govern a consumer's journey through a purchase conversion funnel), predictive analytics (e.g., identifying the impact of a new product feature on future sales and margin), and prescriptive analytics (e.g., advising phone sales representatives on the best offers to make to prospects based on real-time information).

What is the project proposal process?

The MSBA Industry Partner committee evaluates submitted project proposals starting in April preceding the typical September start of the MSBA. The committee reviews each proposal for depth, complexity and opportunity. Key acceptance criteria are:

- Significant potential business impact (in revenue, profit, or equivalent indicator)
- Clear statement of project goals for the proposing organization
- Calculable potential value generated by the application of advanced analytics
- Identified project staff committed to project objectives
- Description of project-related data and high-level estimate of data readiness

How does UC Davis Graduate School of Management support the project student team?

Projects are supported in two ways:

- 1. Through an associated skill-building course sequence in Fall, Winter and Spring
- 2. Through regular (weekly or biweekly) meetings with supervisory staff

Course instructors assess and advance each team's progress through a combination of didactic material covering "soft skills", and in-class presentation and critique. Supervisory meetings focus on project management and troubleshooting. As needed, faculty with specific expertise (e.g., machine learning, advanced statistics, data

architecture, etc.) as well as teaching assistants are also available.

Finally, each team is assigned a Business Executive Mentor (BEM) to guide overall success. BEMs are effectively clinical faculty, selected on the basis of deep industry experience, usually at the executive level.

Who are the partner organizations?

MSBA industry partners range from Fortune 500s to late-stage startups to non-profit organizations. Please refer to this <u>site</u> for past partners.

What additional documents are needed?

Industry partners sign nondisclosure and intellectual property agreements with each team member and with faculty associated with the practicum.

Are the projects considered work for hire or research?

No. The students are getting course credit for this practicum project. The practicum is not an internship or work for hire. These collaborations are instructor-supervised student projects resulting in course grades.

How is information about the partner organization shared with students?

Partner organizations typically work with their computing/data department to find out the best way to share information with the students. Some companies grant access to a secure cloud server.

If you would like to submit a practicum project proposal or if you have any questions, please contact Catherine Jiang at <u>juljiang@ucdavis.edu</u>.

You can find more information about the MSBA at <u>https://gsm.ucdavis.edu/msba-masters-science-business-analytics</u>.