



Partner Information Guide

RUTGERS MBS EXTERNSHIP EXCHANGE PROGRAM



RUTGERS UNIVERSITY
Professional Science
Master's Program
Master of Business and Science

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The MBS Externship Exchange Program is an experiential learning initiative, in which students engage with organizations, gain mentoring, and receive professional experience by working on real world problems or challenges. These are unpaid, on-campus/remote projects, consisting of 2 or more students working 8-10 hours per week over the semester (Spring/Summer/Fall). Every team will have an average of 4-6 students, but some teams can have as little as 2 and as many as 10. Projects run for 12 weeks during Summer semester and 14 weeks during Spring/Fall semesters. Projects can continue over multiple semesters. MBS students and Rutgers undergraduates bring a diverse set of skills and professional experience to these projects. The partnerships between the program and mentor organizations has been highly successful since 2015.

PROGRAM TIMELINE

1-3 Months Prior to start of the Semester	1 Months Prior to start of the Semester	During the Semester
• Introduction outreach from MBS Externship staff to review the MBS Externship Exchange Program, including program specific information and review past projects. • Typically 2-3 phone/video meetings to agree on the project topic, scope and timeline and if a Confidentiality Agreement/NDA is required. • Rutgers MBS Externship Exchange can provide a NDA template or review and use the company NDA (NDA process can take up to 1-3 months). • Deadlines to submit: early January (Spring), early May (Summer), mid August (Fall) for the 2026 school year. Please note these dates may change.	• Continuing conversation to review project details. • Project details are finalized and confirmed. • Students apply for the externship program and provide their skills and interests in project scope, function, & industry. • The advisor committee then matches students to projects 1-2 weeks prior to company kick-off.	• Kickoffs begin at the start of each semester (Spring, Summer, Fall). • Mentors meet remotely with student team for 30-60 mins weekly (or biweekly) for the duration of the semester. • Mentors and student team review project progress, challenges, questions, course corrections and final deliverables. • Mentor approves final presentation at the end of the semester for our MBS Lightning Presentation Day. • Company has option to invite students to present their project to their company colleagues.



Differences Between Internships & Externships

INTERNSHIP

(credit or non-credit)

- ☐ Students typically work on site at the employer for credit or non-credit
- ☐ OPT/CPT Visa limitations for international students
- ☐ Paid or Unpaid
- ☐ Company selects students
- ☐ Typically students work 20-40 hours/week



EXTERNSHIP

(credit or non-credit)

- ☐ Students work on-campus/remotely on a research project for credit or non-credit
- ☐ No OPT/CPT Visa limitations
- ☐ UnPaid
- ☐ Externship Advisors assign students to the projects
- ☐ 8-10 hours per week
- ☐ Company outlines project scope to be performed by students which are vetted by Externship Advisors



Why become a Mentor?



Pilot a project with a diverse set of perspectives and ideas for which your team might not have bandwidth or budget



Inspire and motivate students to elevate their professionalism while honing your own leadership & mentoring skills



Build a direct pipeline to talent and potential hires for your company for internships, Co-Ops and full-time positions



Create a relationship with a major academic research institution



Increase employer branding and promote company's vision, mission and values



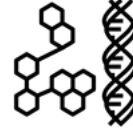
Externship Exchange Program QUICK FACTS

more than
25

CONCENTRATIONS &
MAJORS



Analytics & Data Science



Biotechnology



Engineering



Sustainability



Food Science



Drug Discovery



UX Design



Personal Care Science



Cybersecurity

& many more....

420,000
Training Hours
to Date

APPROXIMATELY



3,000
Student
Participants



Company Mentor
Investment (min)

1 Semester



Company Mentor
Time Investment

60-90 mins per
week



Financial
Compensation

Unpaid

MORE THAN

220



PARTNER ORGANIZATIONS
AND COUNTING...



*Data as of Spring 2025

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Project Areas



Data Analysis

Data Analysis projects can include the creation of dashboard and data retrieval tools for data visualization and forecasting using machine learning algorithms. These projects can be done using Python, R, Matlab or other software that your organization can make available to our students.



User Experience & Product Design

UX or User Experience Design projects can include mockups of website, web page, or app interfaces, chatbox projects, and mockup product engineering. We do not deploy websites or apps.



Food Science

Food Science projects can include the analysis of various food related markets including supply chain analysis and production data analysis across the globe; researching packaging and preservation techniques; and agricultural impacts and sustainability. We do not perform any lab based work.



Personal Care

Personal Care projects can include research, planning and design mockup of regulatory, packaging/labeling and branding/marketing of personal care products. These projects can incorporate a business plan related to products or organizational departments in the cosmetic, hair care, and skin care industries. We do not perform any lab based work.



Pharma/Health

Pharma/Health projects can include literature review, analysis and implementation of business strategies, community health initiatives, and researching regulatory, manufacturing and clinical aspects of the health, pharmaceutical and scientific research fields, along with public health. We do not perform any lab based work.



General Business

General Business projects can include developing a marketing plan for new or existing products, doing a financial or market analysis to understand impacts and long term growth for a company, creating or expanding upon digital marketing and/or social media campaigns and advertisements.



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Ready to submit your application? Please [apply here!](#)



Data Analysis Project Examples

PRODUCT PLASTIC REDUCTION PLAN

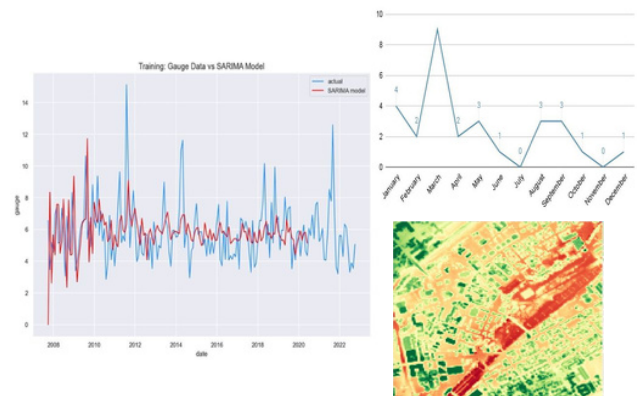
Data analytics tools were developed to model current plastic utilization and to predict future plastic reduction based on sustainable product changes. Sustainable products such as the introduction of a device, "Playtex™ Clean Comfort", that resulted in a tampon with 40% reduced plastic compared to the previous model, "Playtex™ Sport". The goal was to predict plastic reduction based on changes to non-plastic alternatives, utilizing current estimated volumes.

ELECTRIFICATION OF UNIVERSITY FLEET

A university operations department is considering using electric vehicles (EVs) to align with the presidential initiative of a zero carbon footprint by 2040. The first EV was deployed in Fall 2022, and the team was tasked to analyze real-time utilization data and provide recommendations based on operational performance to determine the requirements needed to maintain a 100% electric fleet and how the data supports replacement of the current gas-powered vehicles at this time.

NEW JERSEY FLOOD PREDICTION & MITIGATION

The project focused on providing a strategy to predict and mitigate flood effects in vulnerable NJ areas. Time series models were built to predict location-specific flood events, areas of flood susceptibility were mapped to identify vulnerable areas, insurance liability caused by flooding was quantified, and a strategy was recommended based on the above analyses to mitigate property damage from flooding.



User Experience & Product Design



NEW WILMINGTON REVAMPED

New Wilmington is a rural town in Pennsylvania, and the Borough of New Wilmington needed a new website mockup tailored to their residents, business owners, and tourists. Students revamped the website, adding new pages to promote town businesses, updating all information and images to reflect the most recent town statistics, and finalized components for the Events Calendar, Town Council Contact Form, Search Tools, and Security Plugins to add more features.

COFFEE ROASTING SYSTEM DEVELOPMENT

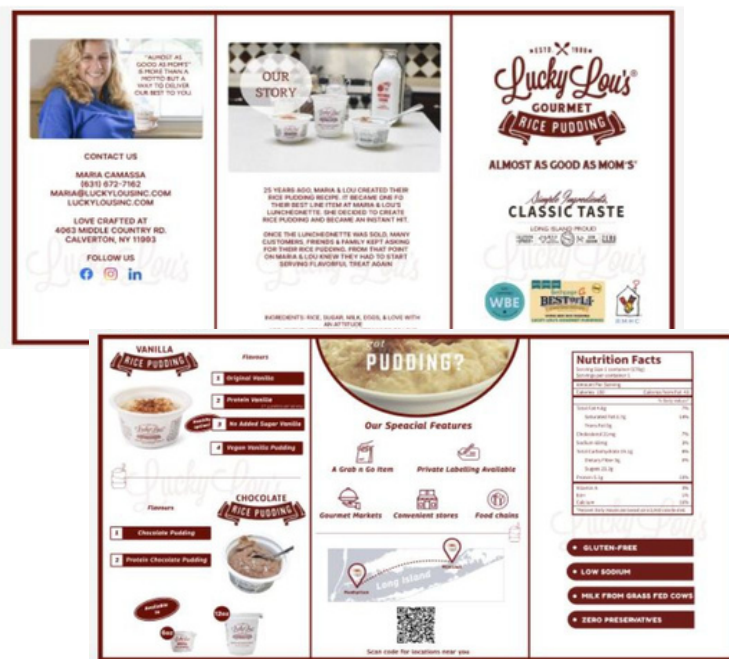
The project focused on developing a coffee roasting system that includes a roaster, ventilation, cooling component, and chaff collection. The goal was to create a design mockup of a real product by the end of the semester so that a future working group can continue the design process.



Food Science Project Examples

PRODUCT SHELF LIFE IMPROVEMENT & BROCHURE CREATION

A small gourmet pudding company that makes rice puddings with natural ingredients in different varieties, including no added sugar, protein, and vegan, currently has a shelf life of approximately 3 weeks. Through this project, the goal was to find suggestions to increase the shelf life to at least 6 weeks to meet the requirement of most distributors and allow for market expansion. Additionally, a new and updated marketing brochure was created showcase their products, ingredients properties, and current sales prices.



SUSTAINABLE FARMING INITIATIVES

Carbon credits for farms and farmland were researched to understand how a small family farm can calculate carbon offsets. This included looking at agriculture and farming carbon credits, ways of sale, and calculations of carbon offsets. Additionally, research was done on carbon calculations for livestock related farming, and researching and creating a methodology of how to calculate carbon offset for grassland and livestock farming. Lastly, the team created a business plan for the farm to explore integrating other crops into their future endeavors.



Personal Care Project Examples

BIOACTIVE AND BIOPOLYMER ASSESSMENT

The team worked with a fortune 500 chemical company to conduct a Bioactives/Biotech Assessment and Biopolymer Technical Assessment to provide cost effective, competitive, sustainable, and efficacious products to their customer demographic by expanding market share and conducting research into new materials and partnerships. The goal was to develop a market share analysis and expand upon personal care products to their customer demographic by investigating novel technologies and bioactives unexplored by competitor companies. The team aimed to identify bioactives leveraging fermentation practices for a healthy skin microbiome and conducted a commercial market analysis for innovative biopolymers in the North American market to transform their current pipeline of products able to compete and collaborate with outside sectors for functional duality. Innovative biopolymers were proposed to include in upcoming relevant formulations appealing to sustainability and customer need goals.

CONSUMER ADVOCACY PLATFORM DESIGN AND LAUNCH PLAN

The team worked alongside leaders on an opportunity to create and launch a new product for those with sensitive skin. Students worked with consumer, prescription, and OTC products and formulations to design new integrations, analyze trends, and establish a launch-ready campaign.



Pharma/Health Project Examples

IDEA TO IMPACT: COMMUNITY HEALTH IN PRINCETON, NJ

Students explored health outcomes in the municipality of Princeton, NJ, utilizing the City Health Dashboard, to assess disparities between state and national health measures. There was a strong focus on community health initiatives in the areas of lead exposure, mental health, and maternal health. Data was leveraged from various sources to drive prevention strategies. All findings were integrated into a community health and improvement plan that the Princeton Health Department will employ to guide health promotion and improvement.



SPINAL IMAGE QUANTIFICATION

Currently, doctors do not have an automated way to retrieve measurements from spinal scans. The team utilized MATLAB and the Image Processing Toolbox to segment the spine, and extract and quantify key features using MRI/CT scans working in tandem with a team of hospital neurosurgeons. Students validated and evaluated the written code using ITK-SNAP to determine the accuracy of the genetic code.



General Business Project Examples

NEW CASTLE PA PUBLIC LIBRARY COMMUNITY OUTREACH

The New Castle, PA Public Library's goal was to research and implement programs to foster better engagement with the Latinx and Old Order Amish members of the county. The team addressed community needs by creating new programs, generating marketing strategies, and developing ways on how to modernize the library's space. Through community outreach, the library hoped to foster better engagement from local communities, promote and expand cultural literacy, and grow user demographics.

FERC 2222 RECOMMENDATION

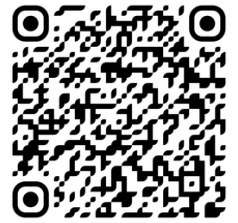
The team researched the newly issued FERC Order 2222 for a Fortune 500 company, which allows smaller-scale distributed energy resources (DERs) access to several energy markets. Different aspects of the energy industry were examined, including energy markets, renewable power generation, electric vehicles & vehicles 2 grid, and energy efficiency with the goal of understanding how FERC Order 2222 will impact the grid and the utility business. Recommendations were provided for how utilities and residential customers can best utilize the order to maximize the potential economic benefit gained.

AEROSPACE INDUSTRY STRATEGY DEVELOPMENT

The team created a strategic plan for a small government defense contracting company to present potential opportunities to join the aerospace defense contracting industry. The plan included; partner recommendations, a SWOT analysis of their potential role within the industry, and determining subsectors of the industry in which they can leverage their capabilities.



MBS Externship Exchange Program Mentor Project Form



Ready to submit your application?

Please scan our QR code or visit:

https://rutgers.ca1.qualtrics.com/jfe/form/SV_0BeHQdP0WKdC6oK

For questions, please contact:

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