

INTRODUCTION



More than ever before, organizations are collecting massive amounts of data in an ever-increasingly complex decision-making environment. Analytics is a key capability needed to unlock the value in that data and to make better decisions—from top line growth to bottom line cost savings to improvements in medicine and community well-being. UC's Center for Business Analytics is here to serve organizations—locally and nationally—to be best-in-class in analytics

HOW WE SERVE OUR MEMBERS

1. Leadership Development

Representatives of Member organizations participate in regular meetings facilitated by the Center to help with their understanding of current analytic trends, talent development and organizational success.

2. Public Events

The Center promotes the awareness of analytic methods and their effective application within corporate, small business, public sector, and academic communities by hosting several events each year, such as the Analytics Summit and Data Science Symposium. These events, which draw hundreds of participants and nationally recognized speakers, also facilitate active networking for attendees.

3. Professional Training

The Center offers non-credit short courses to the public on current analytic techniques, taught by recognized experts in their respective fields. Courses on Visualization, Tableau, Python, R, Analytics with Excel and Data Management are offered regularly in modern education facilities.

4. Student Projects

A variety of options are available to organizations to utilize the Center to help analyze and solve their most important problems. Professional project management, talented students and experienced academicians converge to provide cost-effective solutions utilizing state-of-the-art analytics.



5. Student Engagement

Whether via Center projects, internships, full-time employment opportunities, or company information sessions with targeted student audiences, the Center facilitates identification of the best candidates for an organization's analytics recruiting pipeline.

1 MEMBER FORUMS

A key benefit of Center Membership is the ability for Member representatives to participate in a bi-monthly afternoon forum to network, benchmark and learn from each other and special guests—everything from tools, vendors and techniques to people, project and organization management.



MEMBER REPRESENTATIVES

Member representatives include leaders of analytic functions, key technical leaders, and business leaders who support the need for effective analytic capabilities to drive business objectives. Typical attendees hold director level positions or higher within their organizations and are responsible for disseminating information from the Center to their broader organizations, as well as coordinating contractual obligations with the Center.

FORUM TOPICS

Member Forum agendas usually include a special topic, where an expert is invited to present and discuss with representatives to share common experiences and how problems are tackled effectively. Topics cover a broad range of relevant areas, from technology advances to organization leadership.

FORUM LOCATIONS

About half of the Member Forums are held on campus; the balance held at Member facilities or other locations of particular interest to promote learning and networking opportunities among the Member representatives.

In addition, for those members who are unable to attend in person, live streaming technology is employed to “bring the meeting to them”.

MONTHLY MEETINGS

- Analytic Executive Interviews: McKesson, P&G
- Member Profiles on Analytic Organizations
- Microsoft’s Analytics Strategy
- Data Lakes
- New Analytics: Intelligent Futures
- Leveraging Leading Indicators in Forecasting
- Storytelling: Keeping it Simple and Memorable
- Visualization Platform Market Outlook
- Machine Learning’s Unintended Consequences
- Artificial Intelligence: What’s Real?
- Open Source for Big Data: An Expert’s View
- A Deep Learning Approach for Vision-Based Analysis of Neighborhoods
- Applications of AI, ML, and Predictive Analytics at GE Aviation
- Text Analytics at NIOSH

KEY BENEFITS

- Professional Development
- Peer Networking
- Leadership skill development
- Deep-dive topical training
- Benchmarking

For information about how your organization can be a part of the UC Center for Business Analytics please contact Glenn Wegryn, Executive Director, at 513 556-7146 or email weygrngn@ucmail.uc.edu

2 PUBLIC EVENTS

EVENTS



Data Science Symposium

Held in October, this symposium provides a forum for experts to provide deep-dive relevant perspectives on a wide range of topics and tools in data science. This day long event typically features 3 keynote speakers and multiple tutorials and tech-talks.

Keynote speakers have included:

- John Bossert, Google
- Michael Thompson, P&G
- Kevin Werbach, U Penn
- Andy Kriebel, Facebook
- Joe Blue, MapR

Companies presenting technical & analytics case studies include Amazon, Disney, Great American Insurance, Macy's, Elder Research, Kroger, Fifth Third Bank, Facebook, Cincinnati Reds, FICO, US Bank, P&G, Google, Madtree Brewing, 84.51, Cincinnati Insurance, IBM, Humana, Cincinnati Children's Hospital, Netjets and many more.

Analytics Summit

Our flagship event, held in April, brings internationally-recognized speakers from notable organizations presenting on a wide variety of analytic topics. This event features two days of analytics training and a conference day, focused on real-world applications of business analytics, that includes keynote speakers and topical analytics tracks, with multiple presentations in each track.

Training sessions cover current topics and tools in data science. Recent courses include Machine Learning, Tableau, MS Power BI, Deep Learning in R, Big Data: Hadoop and Spark, Data Mining, and Analytics for Executives.

Pastkeynote speakers:

- Eric Siegel, Founder of Predictive Analytics World and Author of "Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die".
- Tom Davenport, author of "Competing on Analytics" and cofounder of International Institute for Analytics.
- Stephen Few, recognized as a world leader in the field of Data Visualization.
- Jack Levis, Director of Process Management, United Parcel Service.
- Zeynep Tufekci, Technosociologist, Author, Professor at University of North Carolina

Who Attends our Events

Our event audiences represent many industries, with approximately 75% of our attendees coming from the business community. Other attendees include faculty and students who are actively studying or conducting research in analytics.

WHY ATTEND?

- Top analytics experts, focused sessions and topics to help you build and deliver analytics in your organization.
- Meet highly qualified analytics professionals and make new contacts in the Midwest analytics, data science and IT community.
- Share ideas, best practices, and insights with other analytics leaders and academics
- Develop your analytics skills and learn how to apply them

**For information on participating in Center for Business Analytics events, please contact
Larry Porter at 513-556-4742 or email porterlc@ucmail.uc.edu**

3 PROFESSIONAL TRAINING COURSES



The Center offers an extensive selection of analytics and data management in-person courses designed to provide analytics professionals with the skills to manage data, use popular analytics tools, and develop and communicate insights that improve business performance. Courses are taught by leading academics and industry experts and include a mix of lecturing and working sessions.

DATA VISUALIZATION

Learn basic data visualization skills, best practices, and how to present analytical output as meaningful information.

TABLEAU

Introduction-Advanced

The Introduction to Tableau is designed for beginner users and anyone who works with data with or without technical or analytical backgrounds. Advanced Tableau covers advanced chart types, business dashboards, and other advanced methods and features.

MS POWER BI

Introduction-Advanced

The Introduction course is designed to be a primer to Microsoft PowerBI and its use as a data analytics and reporting tool. The Advanced course is a continuation of the "Introduction to Power BI" class and takes a deep dive into advanced level Power BI skills. There will be an even mix of lecturing and working sessions.

PYTHON FOR DATA SCIENCE

Introduction-Intermediate

Introduction to Python emphasizes the core concepts and uses of Python, specifically data types, data structures, functions, and classes. The Intermediate course provides more detailed information on how to program more efficient data science applications in Python, and modeling with scikit learn package.

R FOR DATA ANALYSIS

Introduction-Intermediate

In the Introduction course, we will help both new and existing R users master the basics of R and exploratory data analysis, compute key descriptive statistics, and perform basic data wrangling activities. The Intermediate course will cover the application of R for the entire data science workflow – data acquisition, wrangling, visualization, analytic modeling, and communication.

MACHINE LEARNING Fundamentals

This workshop is designed for beginners with little experience in Machine Learning (ML). Most commonly used tools and methods in ML will be discussed during the workshop with an applied focus.

DATA MANAGEMENT - SQL for Business Analysts

The Data Management course introduces attendees to best practices in database design and how to interact between analytical tools and a database. The SQL course continues the Data Management training and is a hands-on introduction to using SQL.

ANALYTICS FOR EXECUTIVES

This one-day session focuses on providing a fundamental understanding of analytics, examples of successful applications in financial and other industries, how to get started, what resources, skill sets, organization and cultural elements need to be in place for long-term success.

OTHER TRAINING CLASSES

- Data Mining
- Excel Associate Certificate
- Excel Expert Certificate
- Excel for Data Analysis
- Advanced Python
- Advanced R
- Fundamentals of Machine Learning
- Machine Learning with R
- Deep Learning in R
- Big Data

**For more information on these classes and custom analytics training,
Larry Porter at 513-556-4742 or email porterlc@ucmail.uc.edu**

WHAT ATTENDEES SAY ABOUT OUR COURSES

"Exceeded my expectations...Extremely beneficial course. Would recommend to other colleagues."

"Knowledge of instructors was off the charts. Instructors did a nice job of addressing all levels of skill sets."

"Great course, very applicable and loved that it was so hands-on."

"Provided ideas on opportunities where I may be able to apply analytics to current decision/reporting model."

"I like the way things were explained for a beginner. Reference materials and instructor's invitation to email him as needed will really help."

"I love that the instructor did a great job of teaching to the individual abilities of the students."

"Great knowledge/experience on topic. Excellent presentation skills/communication. Tons of examples and interesting topics. Well done and extremely interesting."



CUSTOM ON-SITE PROGRAMS FOR ANALYTICS ORGANIZATIONS

If your organization is facing specific analytics and data challenges, we can design custom on-site training programs tailored to your specific needs, delivered at your location by leading analytics and data subject matter experts. There is no limit to the number of attendees, and programs can be broadcast to remote locations. Optionally, we can prepare the course content using your company data to help solve specific business problems.

4 ANALYTICS PROBLEM SOLVING



There are a variety of options available to engage students, faculty and staff to complete analytics projects for your organization. Whichever option is chosen, the Center for Business Analytics provides a value proposition that delivers value for the client and real-world experience for the engaged students.

CASE STUDIES CLASS ANALYTICS PROJECTS

Client-requested project lasting 14 weeks (Full Semester).

Process

- Performed via the Graduate Case Studies in Business Analytics class.
- Client organization outlines key question / business problem in laymen's terms and provides data for teams of two to five students to investigate and analyze.
- Each student team is guided by an analytics professor and a project manager that review analysis approaches / results and project / communication plans.

Due Dates

- Proposals submitted to the UC CBA Executive Director by Nov 15.
- Projects occur in conjunction with Spring Semester (January–April).
- Final report / presentation delivered end of April.

Additional Info

- UC CBA Members get first opportunity on students/teams for their projects.
- Non-Center organizations will be assigned projects as available.
- Non-disclosure agreements are signed by students, if required.



Cost

- Center members in good standing receive one (or more) projects per year, including software licensing.

OTHER ANALYTICS PROJECTS

Client-requested project targeted for 7–24 weeks.

Process

- Client submits project request to the CBA Executive Director.
- Each student team is guided by an analytics professor and a project manager that review analysis approaches / results and project / communication plans.
- Non-disclosure agreements and data security requirements are formalized for each project

Timeline

- Project proposals submitted by the CBA to the member organization.
- Projects can be arranged for any time during the year.
- Projects initiated in a given school year must complete by the first week of August.

Additional Information

- UC CBA Members have first priority on assignment of students / teams to their projects.
- Non-Center organizations assigned projects as available.
- Non-disclosure agreements are signed as required

Cost

- Projects quoted individually

Learn more about student analytics projects or to participate, please contact:
Glenn Wegryn, Executive Director, at 513 556-7146 or email wegrgrgn@ucmail.uc.edu

5 STUDENT ENGAGEMENT OPPORTUNITIES

The Center helps facilitate identification of the best candidates from UC's award-winning analytics programs for an organization's recruiting pipeline. The Center can help organizations identify talent through Center projects and company information sessions with targeted student audiences for both internship and full-time employment opportunities



STUDENT INTERNSHIP

Client-directed employment of undergraduate or graduate level business analytics students

Process

- As the birthplace of cooperative education, UC offers extensive opportunities for students to receive experiential education while working with companies through internships.
- The Center facilitates opportunities for companies to work with the appropriate UC Career Services personnel to advertise internship opportunities.
- Client manages all aspects of the internship with the student

Duration

- Internships are generally three months in duration (one semester), but can be extended to six months (two semesters).

Cost

- Client bears the cost to employ a student for the duration of the internship.
- Current internship rates range from \$25–35/hour for graduate level Business Analytics students.

CENTER PROJECTS

Center-supported projects provide excellent opportunity for companies to assess the skills and abilities of students.

Process

- Center projects can be provided for member and non-member companies.
- The Center assigns students, faculty and a project manager to work on the defined project.
- For more information on Center Project options, see the section on Analytics Problem-Solving

Duration

- Projects are typically last 3-4 months but shorter or longer engagements may be possible.

Cost

- Each member company is guaranteed at least one project per calendar year as part of their membership.
- Projects are available for non-member companies on a contracted-rate basis.



FULL-TIME STUDENT EMPLOYMENT

Client-direct employment of an undergraduate or graduate level BANA students. Students are employed directly by the client to fill analytics-related roles.

Process

- The Center facilitates opportunities for companies to connect with and interview UC analytics students for full-time roles.
- UC offers fall and spring Career Fairs designated for technically-oriented students including analytics.
- Other opportunities for engaging with students including company-specific presentations, hackathons, and case study competitions may also be available to engage with students.

Timing

- Year round, subject to student availability.
- UC graduation dates are typically in April, August and December.

Cost

- The average starting salary for Bachelor of Science in Business Analytics students is \$74,000, and the average starting salary for Master of Science in Business Analytics students is \$91,600.

**For information on internships and projects, please contact
Glenn Wegryn, Executive Director, at 513 556-7146 or email weygrngn@ucmail.uc.edu**