

INTRODUCTION



More than ever before, organizations are able to collect 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 AND bottom line cost savings to improvements in health 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

Through executive education events, seminars, and other educational programs, the Center promotes awareness of and deepens expertise in analytical methods within the corporate, small business, nonprofit, and academic communities.

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. Visualization, Tableau, R, Analytics with Excel and Data Management courses are offered regularly in modern facilities.

4. Student Projects

There are a variety of options available to organizations to engage students, faculty and staff. The Center works to match the right students to the needs of the client organization.



5. Other Project Options

Includes formal contracted projects with faculty and university resources, student internships and part-time student employment at the undergraduate and graduate levels.

1 MEMBER MEETINGS

Center for
**BUSINESS
ANALYTICS**



A key benefit of Center Membership is having a forum to network, benchmark and learn from each other and special guests—everything from tools, vendors and techniques to people, project and organization management.

BI-MONTHLY MEETINGS

- Professional Development
- Networking
- Leadership skill development
- Deep-dive topical training
- Benchmarking
- Special guest speakers including:
 - Craig Brabec, Sr VP McKesson: Building an Analytics Organization
 - Brian Smith, COO Thinkvine: Agent Based Modeling
 - Nate Murray/Thomas Gottlieb, Chief Data Officer GE: Data Lakes
 - Paul Gervason, Application Specialist, Microsoft Analytics

2 PUBLIC EVENTS

EVENTS



Topical Analytics Day

Held in February, this event focuses on a specific relevant topic in analytics featuring keynote speakers in the morning and software training in the afternoon.

Keynote speakers have included:

- John Elder, Author of *Data Mining for Practitioners* and Director of Elder Research, the USA's most experienced data science consulting firm.
- Mark Nigrini, author of *Forensic Analytics* and Benford's Law and professor.
- Sam Savage, Executive Director of probabilitymanagement.org and author of *Flaw of Averages*.
- Other speakers from companies including SAS, P&G, Unifund, University of Iowa, Teradata, Walt Disney Company.

Past event themes include Data Visualization, Data Mining, Risk Analytics, and Predictive Analytics.

Analytics Summit

Our flagship event, held in May, brings internationally-recognized speakers from notable organizations presenting on a wide variety of analytic topics. The day is organized with concurrent tracks each with multiple presenters from industry.

Keynote speakers have included:

- 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, author of data visualization textbooks and recognized as a world leader in the field of Data Visualization.
- Jack Levis, Director of Process Management, United Parcel Service.
- Stuart Aitken, Chief Executive Officer, 84.51.
- Thornton May, IT Futurist.

Companies presenting analytics case studies

include Infotrust, Disney, Tata Consulting, Macy's, Elder Research, Kroger, Fifth Third Bank, Philadelphia Children's Hospital, Cincinnati Reds, FICO, US Bank, P&G, Boot Camp Digital, Cincinnati Zoo, dunhumby, Cincinnati Financial, IBM, Humana, Cincinnati Children's Hospital, NetJets and many more.

Data Science Symposium

Held in October, this symposium provides a forum for experts to provide deep-dive relevant perspectives in analytics, culminating in a panel discussion and audience Q&A.

Keynote speakers have included:

- Andy Kriebel, Facebook.
- Rex Daisey, EW Scripps.
- Jude Schramm, GE Digital.

Others from companies

including 84.51, P&G, IBM, Cloudera, GE Aviation, SAP, SAS, FICO, Nielsen, Intellegated, Cleveland Indians.

WHY ATTEND?

- Meet highly qualified analytics professionals at the Center's popular events.
- Meet new contacts in the Cincinnati analytics and IT community.
- Top analytics experts, focused sessions and topics to help you build and deliver analytics in your organization.
- Network with UC analytics students.

3 PROFESSIONAL TRAINING COURSES

Center for **BUSINESS ANALYTICS**



The Center offers an extensive selection of analytics and data management courses designed to provide the working professional with the skills to manage data and develop and communicate insights that improve business performance. We can also design classes specific to your organizational needs. All courses are taught by leading academics and industry experts.

Tableau Training

This introductory course will cover the basic concepts of building dashboards in Tableau and then progress into more intermediate and advanced concepts.

Data Visualization

Acquire the data visualization skills and best practices to analyze complex data sets and generate insights. Learn how to present analytical output as meaningful information using leading software packages including Excel and Tableau.

The above two courses will be taught by Jeffrey Shaffer, Tableau Zen Master, an expert in applying data visualization to create insights and competitive advantage.

Introduction to R for Data Analysis

R is one of the fastest growing programming languages and tool of choice for analysts and data scientists. In part, R owes its popularity to its open source distribution and massive user community. In this course, we will help both new and existing R users master the basics of R. There will be an emphasis on using hands on exercises and real world data sets.

Intermediate R

This course will cover the application of R for the entire data science workflow—data acquisition, wrangling, visualization, analytic modeling, and communication. There will be an emphasis on using hands on exercises and real world datasets.

The above two courses will be taught by Bradley Boehmke, author of "Data Wrangling with R."

Introduction to Analytics in Excel

Learn to use intermediate-to-advanced Excel tools for analytics. Topics covered include data visualization beyond the basic charting tools and descriptive analytics methods for analyzing data and generating meaningful insights.

This course is taught by Microsoft MVP Jordan Goldmeier.

Data Management

Gain an understanding of advanced skills, syntax, and techniques to perform analytics and data mining on datasets. Learn the steps to get data into a well-designed database and how to use Structure Query Language (SQL) to interact with data.



Introduction to Data Mining

Examine methods to meet the challenges of developing data mining skills and build predictive

data models in the real world. Using hands-on examples, acquire the techniques experienced practitioners apply when developing their models.

Advanced Data Mining

Develop skills beyond the core data mining competencies for those with intermediate data mining experience. Build on the concepts and tools from the Introduction to Data Mining course.

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.

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4 STUDENT PROJECTS



There are a variety of options available to organizations to engage students, faculty and staff. The Center works to match the right students to the needs of the client organization.

CASE STUDIES CLASS

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 a dataset for teams of one or more students to investigate and analyze.
- Each student team will be guided by an experienced analytics professional to direct and review analysis approaches and conclusions.

Due Dates

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

CAPSTONE PROJECTS

Client-requested project lasting 7-14 weeks.

Process

- Client submits project request.
- Each student team will be guided by an experienced analytics professional and project manager to direct and review analysis approaches and conclusions.

Due Dates

- Proposals submitted to the UC CBA Director. Projects can be arranged for any time during the year, and may also occur as part of the Graduate Case Studies course during the Spring Semester (January-April).



ADDITIONAL INFO

- UC CBA Members get first opportunity on students or 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 project per year, including software licensing. (Gold and Platinum members can receive more).

5 OTHER PROJECT OPTIONS



STUDENT INTERNSHIP

Client-directed employment of BANA students at undergraduate and graduate levels.

Process

- Students are connected to potential internship opportunities via UC Analytics Faculty or the Center staff.

Due Dates

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

Additional Info

- If being used for MS-Business Analytics capstone, student writes up a report on project associated with internship that demonstrates application of material learned during course of study.
- Company data can be disguised as required by employer.

Cost

- Client bears all costs to employ student for duration of the internship.
- Current internship rates range from \$25–35/hr. for MS-Business Analytics students.

CONTRACTED PROJECT

Client-defined project requiring specific deliverables, timing and quality of analysis.

Process

- A proposal is submitted by the Client to the UC CBA Director or an understanding of Client's needs is developed via discussions with Client.
- The Center will submit a formal Statement of Work (SoW)



via the UC Research Institute (UCRI) to the Client outlining objectives, scope, approach, expectations, timing and costs.

Due Dates

- Proposals are accepted at any time during the year.
- Start time and duration of project is dependent on availability of university resources (faculty, students and staff).

Additional Info

- Client's acceptance of SoW results in a binding contract between Client's organization and the University of Cincinnati.

Cost

- Quoted on a project-by-project basis.



PART-TIME STUDENT ANALYST

Student contracted to perform analysis on projects defined and directed by the client organization on a part-time basis.

Process

- UCRI invoices employer on regular basis.
- Requires a SoW and budget estimate to be agreed to by employer and UCRI.

Due Dates

- Year round, subject to student availability.
- Can potentially span multiple years, depending on tenure of individual student.

Additional Info

- Client needs sufficient resources and analytic expertise in-house to guide student's work.
- Contract is signed with UCRI, who administers payment to student.
- Non-disclosure agreements are signed by students, if required.

Cost

- \$40 per hour, plus licensing and travel expenses, if any, payable to UCRI.