Prerequisites
NIU students, alumni, or working professionals who have experience using computer software and are able to understand system commands on your operating systems. Must successfully complete OMIS 259 – Introduction to Computer Information Systems or equivalent, with a grade of C or higher. No prior SAS experience is needed for the boot camp.

Registration
Registration is open now at go.niu.edu/omis-sas. A non-refundable deposit of $300 payable to OM&IS Department, NIU is required in order to hold your seat for the SAS® Base Programming for SAS®9 boot camp. The remaining balance of $365 is due on Friday, Aug. 10, 2018.
If request for cancellation is received at least five business days before the class starts, a refund will be given. A 10 percent administrative fee will be charged for all cancellations.
If a student cancels the boot camp less than five business days before the start date or is a “no-show” for the workshop, no refund will be given.

Contact Information
For registration: outreachregistration@niu.edu
For workshop:
Dr. Yipeng Liu, Assistant Professor of Management Information Systems
815-753-1287
yliu@niu.edu
Barsema Hall 328V, College of Business, Northern Illinois University
or
Dr. Chang Liu, OM&IS Department Chair
815-753-3021
cliu@niu.edu
Barsema Hall 328D, College of Business, Northern Illinois University

Schedule and Cost
Date:
Five day boot camp from Aug. 20 – 24, 2018.
Time:
8 a.m. to 5 p.m., meets daily Monday through Friday. One-hour lunch break at noon and students are responsible for their own lunch.
Location:
Barsema Hall 333, College of Business, Northern Illinois University.
Boot Camp Price:
$665 (cost covers professional instruction and training materials). The standard market price is $3,065 (source: sas.com/certify). Limited number of SAS Boot Camp scholarships are available.
Exam Fee:
$90 to be paid directly to SAS. Your instructor will help you with this during the first day of the boot camp. The standard exam fee is $180. NIU is able to significantly reduce the cost due to the partnership with SAS Global Academic Program.

Instructor
The boot camp will be jointly taught by NIU and SAS. Dr. Yipeng Liu is an Assistant Professor of Management Information Systems at the NIU College of Business where he has extensive knowledge of using SAS. Dr. Yipeng Liu will teach the first two days of the SAS boot camp. SAS Global Academic Program will select an experienced instructor for the last three days’ instruction for the boot camp.

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Become an SAS® Certified Base Programmer

Partnered with SAS® Global Academic Program, NIU College of Business will be offering a summer boot camp for SAS® Base Programming for SAS® 9 to all NIU undergraduates, graduates, alumni and working professionals on Aug. 20-24, 2018. The boot camp prepares students to become SAS® Certified Base Programmer for SAS® 9. This certification is for beginners in SAS programming. It requires knowledge and experience of SAS version 9.4 and is one of the essential requirements for many other advanced SAS data analytics related certifications.

The boot camp will provide an intensive in-class training for accessing and cleaning data, creating data structures, managing data, generating reports, and handling errors using SAS. If you are someone who wants to learn how to write SAS programs for data analysis and decision support for reporting and analytics, then this boot camp for SAS® Base Programming for SAS® 9 is ideal for you. The SAS® Base Programming for SAS® 9 certification is usually considered very helpful in securing an entry level job in data analytics. The boot camp is offered at a significantly reduced fee due to NIU College of Business’ partnership with SAS® Global Academic Program.

Purpose and Benefit

SAS is the leader in programming and data analytics application software. SAS programming and analytical talent is in short supply and high demand in today’s business world. The explosion of data isn’t new. What has changed is the velocity of growth, the diversity of the data and the imperative to make better use of information to transform the business. After completing this boot camp, students will know how to:

Accessing Data
- Use FORMATTED and LIST input to read raw data files.
- Use INFILE statement options to control processing when reading raw data files.
- Use various components of an INPUT statement to process raw data files, including column and line pointer controls, and trailing @ controls.
- Combine SAS data sets using the DATA step.
- Integrate with Access and Excel workbook.

Creating Data Structures
- Create temporary and permanent SAS data sets.
- Create and manipulate SAS date values.
- Export data to standard and comma-delimited files.
- Work with raw data files.

Managing Data
- Investigate SAS data libraries using Base SAS utility procedures.
- Sort observations in a SAS data set.
- Conditionally execute SAS statements. Using the DATA step to modify variable attributes using options and statements, accumulate subtotals and totals, and use assignment statements.
- Use SAS functions to manipulate character data, numeric data and SAS date values.
- Use SAS functions to convert character data to numeric and vice versa.
- Process data using DO loops and SAS arrays.
- Validate and clean data.

Generating Reports
- Generate list reports using the PRINT procedure.
- Generate summary reports and frequency tables using Base SAS procedures.
- Enhance reports through the use of user-defined formats, titles, footnotes and SAS system reporting options.
- Generate HTML reports using ODS statements.

Handling Errors
- Identify and resolve programming logic errors.
- Recognize and correct syntax errors.
- Examine and resolve data errors.