



Northern Illinois University

Study Abroad Office

NIU–ENAE Dual Degree and Study Abroad Program in Industrial and Systems Engineering

May 18 - July 12, 2015

This program is coordinated by Northern Illinois University's Study Abroad Office (SAO) and sponsored by the NIU Department of Industrial and Systems Engineering and ENAE Business School.

ENAE Business School is an international institution focused in postgraduate and executive training. ENAE has been the leading business school in southeast Spain. ENAE's Master degree in Logistics and Operations complements courses offered in the Department of Industrial and Systems Engineering at Northern Illinois University.

PROGRAM DATES: The program will take place in Murcia, Spain and the dates of the program are May 18 – July 12, 2015. Students should plan to arrive in Murcia on Saturday, May 16, 2015. The academic portion of the program will officially begin with the commencement of classes on Monday, May 18, 2015. Classes will end Friday, June 12, 2015.

PROGRAM OBJECTIVES: The overall purpose of this program is to provide participants an opportunity to gain knowledge and experience in topics such as process optimization, supply chain, purchase management and negotiations, and international logistics. Global logistics and internationalization are developing topics which gain lot of attention these days. Understanding the intricacies involved in decision making in a global market is essential to remain competitive. This program will facilitate many opportunities to the students to learn these intricacies, tools to analyze the issues at hand, and enrich their experience in a culturally diverse setting.

NIU PROGRAM DIRECTOR: Professor Purushothaman Damodaran, Chair of the NIU Department of Industrial and Systems Engineering will serve as the program director. Professor Damodaran can be reached at pdamodaran@niu.edu or (815) 753-5660.



PROGRAM SITE: ENAE Business School is an international institution focused in postgraduate and executive training. ENAE has been the leading business school in southeast Spain. ENAE's Master degree in Logistics and Operations complements courses offered in the Department of Industrial and Systems Engineering at Northern Illinois University.



MURCIA – SITE OF THE PROGRAM: Murcia is a city in south-eastern Spain. It is the seventh largest city in Spain. (Economically). Murcia predominantly acts as a center for agriculture and tourism. Murcia also has multinational companies such as Henry Milward & Sons, General Electric, and Paramount Park Studios – to name a few.

PROGRAM AUDIENCE: This program is open to intermediate and advanced undergraduate level and graduate level students. Students should have an interest in industrial engineering and global logistics along with a desire to increase their knowledge of these areas through the means of an on-site experience.

CLASSES: The students are required to take two courses from NIU and one course from ENAE. The lectures for the two NIU courses will be covered over four weeks in Spain. One of the ENAE courses will be covered over one week. The students will also visit local companies, and interact with practitioners from industry and complete a case study in the area of supply chain management and logistics. The sessions will normally be held in the mornings and/or afternoons. There will be free time during the day to allow participants access to shopping facilities, banks, and other facilities of interest that are not normally open in the evening or on Saturdays and Sundays.

ACADEMIC CREDIT: For satisfactory participation in the program, the student participants will be enrolled for the summer 2015 semester and will receive six (6) semester hours of undergraduate/graduate credit in the following NIU ISYE elective courses. The courses taken while participating on a study abroad program **cannot** be audited.

UNDERGRADUATE CREDIT

ISYE 439 Six Sigma Performance Excellence and Modern Problem Solving

3 semester hours

Description: The Six Sigma formula for success is a mixture of hard skills, soft skills, tools, mentoring, DMAIC, and the Black Belt organization. Introduction to these areas and foundation on how to implement them. Focus on robust foundational problem solving techniques that enhance the functional role of individuals to quickly solve complex problems. Cost, quality, and throughput improvement will be addressed.

Prerequisite: ISYE 335 or STAT 350, or UBUS 223.

AND

ISYE 466 Analysis and Design of Supply Chain Systems

3 semester hours

Description: Analysis of material and information flows in complex production-distribution networks. Knowledge and the tools necessary to develop, implement, and sustain strategies for designing supply chains. Focus on the use of analytical modeling techniques to understand and manage supply chains. Topics include planning demand and supply, inventory management, transportation, network design and facilities decisions, and coordination in a supply chain.

Prerequisite: ISYE 440 or consent of department.

GRADUATE CREDIT

ISYE 539 Six Sigma Performance Excellence and Modern Problem Solving Civilization

3 semester hours

Description: Introduction to hard skills, soft skills, tools, mentoring, DMAIC, and the Black Belt organization. Foundation on implementation of these areas. Focus on robust foundational problem solving techniques that enhance the functional role of individuals to quickly solve complex problems. Cost, quality, and throughput improvement will be addressed.

Prerequisites: ISYE 335 or STAT 350, or UBUS 223

AND

ISYE 566 Analysis and Design of Supply Chain Systems

3 semester hours

Description: Analysis of material and information flows in complex production-distribution networks. Provide knowledge and the tools necessary to develop, implement, and sustain strategies for designing supply chains with a focus on the use of analytical modeling techniques to understand and manage supply chains. Topics include planning demand and supply, inventory management, transportation, network design and facilities decisions, and coordination in a supply chain.

Prerequisites: ISYE 540 or consent of department.

HONORS CREDIT: Qualified undergraduate students may also elect to receive Honors credit for any study abroad course(s) with the approval of the NIU faculty or instructor responsible for the course. For more information please contact the University Honors Office.

COURSE REQUIREMENTS: The student participants must attend all scheduled program activities to include: lectures, field visits, speaker sessions, and other activities included in the itinerary. The course requirements consist of successfully completion of all assignments, quizzes, exams, and projects. All the assigned work should be completed before the end of the summer semester. Detailed instructions will be provided to the students by the individual faculty members. In addition to the two NIU courses, the student participants will enroll for three hours of graduate credit to take ENAE course. This course can be transferred after successful completion.

APPLICATION: Click [NIU-ENAE Dual Degree and Study Abroad Program in Industrial and Systems Engineering, Murcia, Spain](https://niu.studioabroad.com) or visit the NIU Study Abroad Office website at <https://niu.studioabroad.com> (and search for the *NIU-ENAE Dual Degree and Study Abroad Program in Industrial and Systems Engineering, Murcia, Spain* program) to begin the online application process for this program. The online process provides guidance on requesting information, advising, or applying for the program. Please note that at the time of application, applicants will be expected to submit a signature verification form and copy of their ID to the Study Abroad Office. More detailed instructions can be found on the website.

\$200 APPLICATION FEE/DEPOSIT: A \$200 application fee/deposit is required of all applicants. The \$200 is broken down into \$100 for the non-refundable application fee and \$100 for a program deposit. Both the application fee and the deposit will be applied to the total balance of the program cost. The \$100 deposit is refundable only if the participant withdraws prior to the withdrawal deadline indicated on the program materials or for medical reasons verified by a physician if the withdrawal takes place after the withdrawal deadline.

The \$200 application fee/deposit will be charged to NIU students' NIU Bursar's account. (Checks and money orders cannot be accepted from NIU students.) Non-NIU students must submit a check or money order in the amount of \$200. More detailed instructions regarding the application fee/deposit can be found on the seminar application website.

IMPORTANT – All applications will be categorized as “Pending – No Deposit” until the \$200 application fee/deposit has been received (or, in the case of non-NIU students, once a check has been received). The Study Abroad Office will not consider or process applications without the \$200 application fee/deposit. In order to reserve your place in the program you must submit the \$200 deposit within 14 days of application. After 14 days applications without a deposit will be inactivated.

APPLICATION DEADLINE: April 1, 2015
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APPLICATION AND ADMISSION PROCEDURES: Currently enrolled students must meet NIU Office of Admission or Graduate School, as well as College of Engineering and Engineering Technology course and GPA requirements. Students must be in good academic

standing at the time of application. Students who are on academic probation are not eligible to participate. **Applicants must participate in the *entire* program and satisfy NIU undergraduate admission and course requirements.**

For undergraduate students to be admitted to the program, an applicant's official transcript must be on file in the Study Abroad Office. Students who are currently enrolled at NIU, or who have previously enrolled at NIU, do not need to request an official transcript; the Study Abroad Office will make this request on behalf of the applicant. Students who want to participate in the program and earn academic credit from NIU who have **not** previously enrolled at NIU, or who are not **currently** enrolled at NIU, should ask the registrar at their home institution to forward an official transcript as soon as possible to the Study Abroad Office. (Student-issued and photocopied transcripts are not acceptable.) Questions relating to the admission requirements or transcripts should be directed to the NIU Study Abroad Office.

Students who desire to obtain graduate credit must either be admitted to a graduate program within the NIU Graduate School, or be admitted to the status of a "student-at-large" (SAL) within NIU's Graduate School. For students to be admitted to the program for graduate credit, the applicant's official transcript must be on file in the NIU Study Abroad Office. Students who are currently enrolled at NIU, or who have previously enrolled at NIU, do not need to request an official transcript. However, students who will participate in the program in order to earn academic credit as an SAL (students who have not currently enrolled nor previously enrolled at NIU) must provide a transcript from the baccalaureate institution and from any institution at which graduate credit has been earned. This document must be provided to the SAO before a student can be admitted as an SAL to the program.

NIU students cannot have any encumbrances against their records. Any encumbrances placed on a student's records by NIU (i.e., the Graduate School, Undergraduate Admissions, Bursar's Office, Accounts Receivable, Registration and Records, Health Services, Parking Services, etc.) must be cleared before a student is granted admission to a study abroad program.

TRANSATLANTIC TRANSPORTATION: Purchasing the flight ticket as a group is economical and it also solves some logistical problems when transporting from the airport to ENAE campus. The students will be asked to deposit a check with the Industrial and Systems Engineering department to facilitate group ticket purchase.

LAND TRANSPORTATION: Travel on program-related field trips will be by chartered coaches. Travel during free time is the responsibility of the student.

HOUSING AND MEALS: Students will reside in dorms located less than 100 yards from the ENAE Business School. The rooms come with a stove and refrigerator so students can cook, if they choose to.

PASSPORT: All participants are expected to possess a passport in order to participate in this program. *Important Note: U.S. passports must be valid SIX months beyond the intended stay overseas.* Individuals who do not currently possess a valid passport should apply for one immediately. Information on acquiring a passport is available at the U.S.



State Department's Website: <http://travel.state.gov/content/passports/english.html>.

U.S. passport holders do not need special visas for this program. Foreign passport holders may need special visas for travel in Europe **and are responsible for obtaining all necessary visas.**

INTERNATIONAL STUDENT I.D. CARD: The ISIC card is provided as part of the program cost. The I.D. card can provide discount on international airfare and other travel. Students will receive an application and instructions for obtaining this card when accepted into the program. The International Student Identity Card also includes a limited health and accident insurance policy which is only valid outside the U.S. Students will have to pay bills at the time of treatment and will be reimbursed later.



VISA: A visa is not required for US citizens staying in Spain less than three months.

PASSPORT AND ISIC PHOTOS: You may have your passport and/or ISIC photo(s) taken in the NIU Study Abroad Office. Photos are \$3.00 for the first photo and \$2.00 for each photo after that. After the first two photos, photos must be purchased in multiples of two. Photos are usually developed while you wait. Study Abroad Office hours are 8:00 a.m. – 12:00 p.m. (closed over the lunch hour) and 1:00 – 4:30 p.m.



HEALTH REQUIREMENTS/VACCINATIONS: Travelers entering Spain are not required to have any particular vaccinations. However, if you have questions on this matter you can contact the NIU University Health Service Travel Clinic for information on what immunizations are required. The Travel Clinic can administer most immunizations to currently enrolled NIU students. Most immunizations require a fee. Consult the Travel Clinic several months before you travel.

NIU MAJOR MEDICAL INSURANCE: NIU Student health insurance is required for participation in an NIU study abroad program. Participants not currently enrolled in the NIU insurance plan will be enrolled in the NIU major medical Insurance Plan (comprehensive) that has a \$250 deductible clause. Students requiring medical attention will be expected to pay any related costs and then file a claim with the NIU Student Insurance Office after returning to the States. Receipts showing payment for all medical expenses are required for reimbursement.

PROGRAM COST: The cost of the program covers the following items and services:

- Housing.
- Admission fees and land transportation for all program-related field trips.
- Transportation to and from airport.
- International Student Identification Card (ISIC)
- 3 or 6 semester hours of undergraduate or graduate credit.
- NIU major medical insurance.

Graduate Program Cost: \$5,805

Undergraduate Program Cost: \$4,505

All prices quoted are subject to change. The information contained in the program documents and forms is presented in good faith and is believed to be correct as of the date presented. Northern Illinois University reserves the right to amend, modify, revise, or delete any information appearing in these documents, including but not limited to the cost of the program.

Non-NIU students should consult with their home institutions regarding additional costs that may apply to study abroad. Non-NIU students are responsible for any study abroad charges imposed by their home institution.

Additional Costs to Participants: Other expenses that will be incurred by the participants include:

- Cost of acquiring a passport (approximately \$135)
- Visa fees (if applicable)
- \$40 Undergraduate application fee (Applies to **non-NIU** undergraduate students only)
- Round trip airfare between the U.S. and Spain
- Transportation from Alicante Airport if not arriving in a group
- Transportation to the Alicante Airport at the end of the program
- Transportation and expenses for free-time pursuits
- Purchases of a personal nature

NIU UNDERGRADUATE APPLICATION FEE: (Applies to Non-NIU students only):

There is a \$40 non-refundable Undergraduate Application fee for students applying to NIU for the first time. If you are currently enrolled at NIU as a degree-seeking undergraduate student, you are not required to submit this payment.

If you are applying to NIU for the first time you will be provided with a link in your acceptance packet that will guide you to the online NIU Undergraduate Application. In the online application you will be asked to pay the \$40 application fee by credit card or check.

FINANCIAL AID: As a participant in a study abroad program through NIU, applicants may be eligible for: Pell Grant, SEOG, Perkins Loan, PLUS Loan, Subsidized or Unsubsidized Stafford Loan, MAP Award or your privately awarded scholarship with consent of awarding organization. Tuition waivers do not apply.



Please contact Pamela Rosenberg, the International Programs business manager, in Williston Hall 407, (815) 753-9530, or prosenberg@niu.edu for more information.

WITHDRAWAL FROM PROGRAM: Applicants withdrawing from the program after March 15, 2015 will not be refunded the \$100 program deposit.

Applicants withdrawing from the program after this date will also be held accountable for any funds obligated to overseas vendors and agents on the applicant's behalf. This provision is in effect even if the applicant has not submitted the \$100 deposit or additional payments, and if the applicant is applying for financial aid.

If the applicant must withdraw after March 15, 2015 for medical reasons, funds obligated on their behalf to overseas vendors can only be refunded if:

- 1) The request is submitted to the Study Abroad Office in writing and accompanied by a signed statement stating that travel is not advised from a physician on the physician's letterhead; **and**
- 2) NIU is able to obtain refunds from overseas vendors and agents.

CANCELLATION OF PROGRAM: The Study Abroad Office and ESTO reserve the right to cancel this program if the minimum required enrollment is not attained. If, prior to the commencement of the program, a U.S. State Department Travel Warning is issued for Spain, all applicants will be notified promptly of the warning and the possibility of cancellation of the program. If, during the course of the program, a U.S. State Department Travel Warning is issued for Spain, students will be promptly notified of the warning and the advisability of canceling the program.

**NORTHERN ILLINOIS UNIVERSITY AND ENAE BUSINESS SCHOOL
RESERVE THE RIGHT TO ALTER OR CANCEL THIS PROGRAM
AS MAY BE DEEMED NECESSARY!**