


Summer 5-20-2012

# Assessing the Unassessed: Incorporating Evaluation into the North Carolina State University Curriculum Integration Program

Jamie B. Snow  
*SIT Graduate Institute*

Follow this and additional works at: <https://digitalcollections.sit.edu/capstones>

 Part of the [Curriculum and Instruction Commons](#), [Educational Assessment, Evaluation, and Research Commons](#), [Higher Education and Teaching Commons](#), and the [International and Comparative Education Commons](#)

---

## Recommended Citation

Snow, Jamie B., "Assessing the Unassessed: Incorporating Evaluation into the North Carolina State University Curriculum Integration Program" (2012). *Capstone Collection*. 2527.  
<https://digitalcollections.sit.edu/capstones/2527>

This Thesis (Open Access) is brought to you for free and open access by the SIT Graduate Institute at SIT Digital Collections. It has been accepted for inclusion in Capstone Collection by an authorized administrator of SIT Digital Collections. For more information, please contact [digitalcollections@sit.edu](mailto:digitalcollections@sit.edu).

ASSESSING THE UNASSESSED: INCORPORATING EVALUATION INTO  
THE NORTH CAROLINA STATE UNIVERISTY CURRICULUM  
INTEGRATION PROGRAM

Jamie Snow

PIM 70

Capstone Paper submitted in partial fulfillment of the requirements for a

Master of International Education at

SIT Graduate Institute in Brattleboro, Vermont, USA.

May 25, 2012

Advisor: William Hoffa

### **Dedication and Acknowledgements**

This paper is dedicated to Stephen Milder, my amazing husband who took time out of his own career path and studies to encourage me to pursue my dreams. We have faced many challenges. Together, I look forward to embarking on our new adventures ahead. There is no one else I would rather have by my side. Thank you for your eternal love and support.

I would like to acknowledge my SIT Advisors, Dr. Sora Friedman and Dr. William Hoffa. Sora patiently and thoughtfully guided me during the on-campus portion of my time at SIT. Bill counseled and encouraged me throughout my off-campus journey. Both were instrumental in my personal and professional learning. I would also like to acknowledge all of the SIT professors who taught me both in and outside of my on-campus classes and who informally advised me during my time at SIT. You are amazing people.

Thank you to my mentor and friend, Brooke Ashley, who first introduced me to Curriculum Integration and who continues to encourage my growth and advancement in the international education field.

To my SIT family, friends, and clustermates: We endured many group meetings. We advised one another during difficult assignments and job searches. And, we encouraged each other through tough times. Thank you for being there for me as I hope I was there for you. As we begin the next stages of our lives, I hope that we continue to grow together, learn from one another, and lean on each other for support.

Much love and many thanks to my mom, dad, and brother who have always believed in me and in my ability to accomplish my goals.

**Consent to Use of Capstone**

I hereby grant permission for World Learning to publish my Capstone on its websites and in any of its digital/electronic collections, and to reproduce and transmit my CAPSTONE ELECTRONICALLY. I understand that World Learning's websites and digital collections are publicly available via the Internet. I agree that World Learning is NOT responsible for an unauthorized use of my Capstone by any third party who might access it on the Internet or otherwise.

Student Name: Jamie Snow

Date: 01/24/12



## Table of Contents

DEDICATION AND ACKNOWLEDGEMENTS.....	ii
CONSENT TO USE OF CAPSTONE.....	iii
ABSTRACT.....	1
INTRODUCTION.....	2
PROGRAM CONTEXT.....	7
PROGRAM RATIONALE.....	10
THEORETICAL FOUNDATION.....	10
NEEDS ASSESSMENT.....	15
GOALS AND OBJECTIVES.....	18
ASSESSMENT PLAN DESCRIPTION.....	19
DEFINITIONS.....	19
TIMELINE.....	21
PARTICIPANTS.....	22
ASSESSMENT PLAN DESIGN.....	23
STUDENT ENGAGEMENT.....	24
PROGRAM REACH.....	25
CURRICULAR ALIGNMENT.....	27
STAFFING PLAN.....	32
MARKETING PLAN.....	34
PARTICIPANT RECRUITMENT.....	35
BUDGET.....	36
BUDGET NOTES.....	36
EVALUATION OF THE ASSESSMENT PLAN.....	37
CONCLUSIONS AND IMPLICAITONS.....	37
REFERNCES.....	40
APPENDICES.....	43

### Abstract

Curriculum Integration (CI) is the incorporation of study abroad into existing academic curricula through faculty and staff collaboration. The North Carolina State University (NCSU) CI program was initiated in 2008. Currently the NCSU Study Abroad Office (SAO) is working to update, define, and enhance the direction of this program. NCSU recently updated its strategic plans to include goals regarding campus internationalization and global engagement. The NCSU CI program is viewed as a means to accomplish these goals. However, four years after its inception, there is still no evaluation of any of the CI program initiatives. Assessment and evaluation are important practices to perform in order to determine the effectiveness and value of a program. To address the NCSU SAO need to develop a CI assessment plan, this paper outlines an evaluation plan for the current CI program, beginning with the history of CI at other universities. This evaluation plan focuses on three facets of the CI program: (1) student engagement, (2) program reach, and (3) curricular alignment. Student engagement encompasses the barriers preventing students from studying abroad. Program reach is the ability of CI efforts reach individuals across the NCSU campus. Curricular alignment addresses the quality of classes abroad compared to those offered at NCSU and the preparedness of returned study abroad participants for their next semester of classes at NCSU. This CI assessment plan is designed to determine the effectiveness and legitimacy of the NCSU SAO CI program efforts and to measure the value of the study abroad programs promoted through CI efforts for students in specific majors. The hope is that this evaluation design will be transferable to all NCSU academic departments and colleges that participate in the CI program as well as to other universities across the United States.

Assessing the Unassessed: Incorporating Evaluation into the North Carolina State University  
Curriculum Integration Program

### **Introduction**

Curriculum Integration (CI) is the incorporation of study abroad into existing academic curricula through faculty and staff collaboration. It is the empowerment of academic advisors and university faculty to be knowledgeable champions for study abroad opportunities and the movement to elicit intentional decisions among students when choosing their own best-fit study abroad programs (Ashley, 2011). CI initiatives also include the process of strategically identifying and partnering with academically relevant study abroad programs worldwide to ensure parallels with the disciplines offered at home institutions. Currently, the North Carolina State University (NCSU) Study Abroad Office (SAO) is working to define and enhance the direction of its own CI program in order to “increase student access to degree-relevant study abroad experiences” without delaying graduation (“Curriculum Integration,” n.d.). The long-term NCSU strategic plan, titled “The Pathway to the Future: NCSU’s 2011-2020 Strategic Plan” (2011), lists the enhancement of “local and global engagement through focused and strategic partnerships” as Goal 5, the fifth of its five major goals. One of the three implementation strategies for this goal is to “support and provide opportunities for increasing students’ civic and global knowledge, experience, and activities” (2011). The NCSU SAO CI program is one of the University’s major action items answering this implementation strategy. It is seen as a means to achieve Strategic Plan Goal 5. Besides increased opportunities abroad, the idea behind CI signifies a larger principle. CI is the attempt to shift academic department, college, and university culture. It is the effort to encourage individuals throughout an entire university to

change their own expectations about study abroad and to promote study abroad opportunities across campus (Woodruff, 2009).

Since its inception in 2008, the NCSU SAO has used a skeleton of the Minnesota Model of Curriculum Integration in the implementation of its own CI program. This model “started small in 1995 and...Since then the Study Abroad Curriculum Integration initiative has been a pathway for developing study abroad capacity at the University of Minnesota” (Woodruff, 2009, p. 3). Because the Minnesota Model of Curriculum Integration was successful, many other universities have worked to incorporate aspects of this model on their own campuses. Despite using the Minnesota Model as a guide, there are a number of issues with the implementation of the NCSU SAO CI program. Namely, the CI program processes are not iterative. There are no evaluation processes before, during, or after the formation of CI partnerships or the launch of new CI initiatives. The NCSU SAO does not have any formal or informal evaluation tools to measure its CI program. According to an email from the NCSU SAO Director, Ingrid Schmidt, an evaluation plan was slated to be developed as the next step in the CI process, once the basis of the program was more finalized. Ms. Schmidt explained, “things began on a very minimal, pilot basis just to test the waters and see how the project might be received” (I. Schmidt, personal communication, April 3, 2012). As stated above, the NCSU SAO CI program began in 2008. Today, four years after the inception of the CI program, there are still no evaluation processes in place. Currently reaching over 15 academic departments and colleges across the NCSU campus, the CI program is no longer a pilot.

The CI program is deemed important at NCSU because the two largest colleges on campus, (1) Agricultural and Life Sciences and (2) Engineering, include many science, technology, engineering, and mathematics (STEM) majors. STEM majors are especially

relevant on an international scale, because “in the next five years, STEM jobs are projected to grow twice as quickly as jobs in other fields” (“STEM Education Matters,” n.d.). With the globalizing economy, employees filling these new positions are expected to work on international teams and to travel around the world, maximizing the need for NCSU STEM students to gain international experience before entering the workforce. The NCSU SAO claims that individuals from these majors are underrepresented in study abroad at NCSU, yet there are no ongoing reports showcasing the number of students studying abroad from any major offered on campus. It is also unknown which values from study abroad experiences the faculty from each department deem as the most essential for their students. Each industry looks at international experience differently. The NCSU SAO should, for example, gather information about why study abroad experiences are important to chemistry majors versus history majors. Regardless of this lack of information, the NCSU SAO markets “best-fit” programs to students from specially selected academic departments. Although the SAO is working to promote specific programs to specific sets of students, it is unknown whether or not the information marketed through the CI program is actually reaching students. Even if the information is reaching students, there is no measure of whether or not the CI efforts affect students’ study abroad decision-making processes. The SAO claims to focus its CI efforts on “departments where we are most needed, who could stand to really benefit from CI” (Ashley, 2011); but, there is no rubric to define these needs. The NCSU SAO does recognize that each college and department has different needs. There is no documentation regarding what strategies worked and did not work for each department throughout the beginning stages of the CI program. With turnover in the NCSU SAO, relationships originally established with various academic department and college champions through the CI program are null.

Last year, I spent three weeks in Mali learning about its education system. While in Mali, I conducted research for a local non-governmental organization, the Institut pour L'Education Populaire (IEP). While working with IEP, I was asked to research the effectiveness of their evaluation processes for a new program they were implementing in schools across the country. Performing this research was the first time I truly began to appreciate the importance of assessment and evaluation in program design and delivery. Despite my research findings, I was impressed with the measures IEP was taking to ensure the effectiveness of their new program. Mali is one of the top five poorest countries in the world (Hindman, 2011); and, with such a lack of resources, it was amazing to witness the steps being taken by IEP to enhance the Malian education system. For my SIT practicum I decided that I wanted to gain experience working in a study abroad office. After assessing aspects of the Malian education system, I was drawn to the Curriculum Integration Coordinator, Graduate Intern position at NCSU. I was interested to learn about study abroad course mapping at a U.S. university. Working on the CI program at NCSU, I was surprised to find that, at this first-world institution, there were not proper evaluation processes created to measure the CI program. Because CI was the main focus of my internship, I became more and more vested in the value of the program. I wanted to measure whether or not it is and was positively impacting NCSU students. I wanted to determine whether or not the energy, resources, and time that the NCSU SAO has and is devoting to CI initiatives are worthwhile. In order to fully determine whether or not the NCSU SAO CI program is accomplishing its purpose, I believe that the NCSU SAO needs to create and implement an assessment and evaluation process for its CI program, which is how this paper topic was generated.

Assessment and evaluation are important practices to perform when designing, developing, and implementing a program. Assessment and evaluation help determine the effectiveness of the program. They provide information about accountability and resource allocation; and, they define what processes and procedures work and which need improvement. Without assessment and evaluation, projects can move in the entirely wrong direction, resulting in extra work and wasted time. In the case of most university programs, “Student learning outcomes data are essential to better understand what is working and what is not, to identify curricular and pedagogical weaknesses, and to use this information to improve performance” (Kuh and Ikenberry, 2009). Before moving forward, or in the wrong direction, the NCSU SAO needs to determine whether or not its current CI initiatives have been and are effective. This will help prevent the SAO from expending wasted energy and resources. Because the NCSU strategic plan is counting on the CI program to help accomplish goals of the NCSU 2011-2020 Strategic Plan, it is imperative to steer the CI program in the right direction. According to the Forum on Education Abroad website (n.d.), “The field of education abroad is always seeking better data about learning outcomes to improve programs and advocate for the value of education abroad.” To help steer outcomes assessment in international education, the Forum published a *Guide to Outcomes Assessment in Education Abroad*. The book states, “carefully designed evaluation is a critical need” (Bolen, 2007, p. 25). An assessment and evaluation plan is the navigational guide necessary to keep the current CI program on track. The following paper outlines a potential assessment and evaluation plan for the NCSU SAO CI program. Due to the limitations outlined by this Capstone project most examples in this document, specifically regarding aspects of the evaluation design, are from the Industrial Systems Engineering (ISE) Department housed in the College of Engineering. Yet, this evaluation plan is meant to be

transferable to multiple academic departments and colleges both across the NCSU campus and to universities across the United States.

### **Program Context**

With 34,767 students (25,176 undergraduates and 9,591 graduates), NCSU is the largest four-year higher education institution in North Carolina. NCSU is a comprehensive land-grant university located in the capital city of Raleigh. As a land-grant institution, NCSU received funding in the form of federally controlled land for its conception in 1887. This funding came with a stipulated mission resulting from the industrial revolution focused on providing students with a liberal arts education concentrated in the fields of agriculture, engineering, and life sciences. Today, two STEM colleges, the College of Agriculture and Life Sciences (5,816 students) and the College of Engineering (8,368 students), serve the largest number of students at NCSU. The current student population demographics include: (1) 81.5 percent in-state, (2) 55.9 percent male, and (3) 80.1 percent white (“NC State Selected Facts,” 2012).

The Study Abroad Office at NCSU has been serving students to provide academically-based international experiences for over 30 years. Even amidst a very challenging economic climate, study abroad participation rates at NCSU have consistently increased or largely remained constant over the past five years. Currently, there is clear encouragement of global engagement by NCSU students, faculty, and staff from the upper echelons of the University. In his installation as Chancellor in 2010, Randy Woodson noted that his vision for NCSU was to be locally responsive and globally engaged. In his new role, Woodson initiated a University-wide strategic plan overhaul. The new strategic plan, “The Pathway to the Future,” includes a revised mission statement, expansion of NCSU values, additional accountability guidelines, modified strategic goals, and improvements to the document tone and flow. The new mission statement



and strategic plan remain grounded in the STEM fields, but include large foci on the internationalization of the NCSU campus and curricula as well as the development of globally engaged students, faculty, and staff (“Strategic Planning,” 2011). Of the five major goals outlined in “The Pathway to the Future,” the NCSU SAO is expected to play a sizable role in the implementation of two of them: (1) “Goal 1: Enhance the success of our students through educational innovation” and (2) “Goal 5: Enhance local and global engagement through focused strategic partnerships” (“Strategic Planning,” 2011).

The NCSU SAO also recently updated its mission statement: “The mission of the Study Abroad Office is to serve all North Carolina State University students by providing academically well-matched, immersive experiences abroad, with a commitment to safety and accessibility” (“Study Abroad Office Mission Statement,” n.d.). The goals to help accomplish this mission include: (1) develop and administer programs which enhance intercultural learning outcomes for students, (2) partner with academic units to support programs that develop discipline-specific global competencies, (3) ensure a high standard of safety and accessibility for all study abroad programs, and (4) increase participation in credit-bearing programs outside of the United States (“Study Abroad Office Mission Statement,” n.d.). Like its mission statement, the NCSU SAO has grown rapidly in the past 15 years and continues to expand at an increasingly fast rate. The NCSU SAO consisted of three employees when the SAO Director, Ms. Schmidt, began in her role in 1996. Today, the office consists of 13 full-time employees and five graduate student interns and it is still growing. During the 2009-2010 school year, NCSU sent approximately 1,060 undergraduate students abroad, equating to approximately 20 percent of the undergraduate student population (“Undergraduate Enrollment,” n.d.). The majority of students who study abroad at NCSU attend faculty-led summer programs. Dr. Woodson hopes to increase the

number of students studying abroad as well as to encourage more students to participate in semester- and year-long study abroad programs. It is the objective of Ms. Schmidt, to accomplish this goal, in part, by expanding the SAO staff. Ms. Schmidt hopes to support the push in numbers while still controlling the quality of NCSU study abroad programs by finding more ways to offer worthwhile and affordable study abroad programs to students in underrepresented degree areas.

Brooke Ashley, a former NCSU SAO Assistant Director, was the NCSU employee who originally initiated the CI program for the NCSU SAO in 2008. During her time at NCSU, Ms. Ashley was working towards her PhD in Educational Research and Policy Analysis. Through her studies, Ms. Ashley became interested in the “Minnesota Model” of curriculum integration and decided to pilot a version of this model at NCSU. Amid her advising responsibilities, Ms. Ashley, along with a string of three graduate interns, molded and managed the CI program since its inception in 2008. In November 2011, Julia Law took over Ms. Ashley’s position as Assistant Director. In her current role, Ms. Law manages the NCSU SAO CI program.

Because the CI process works to provide its stakeholders a feeling of ownership, CI has gained a lot of recognition and regard across campus. Due to the CI program’s acclaim and its ties to the new NCSU strategic plan, Ms. Schmidt deemed the CI program *the* top priority for the SAO in its new five-year strategic plan. She wants the program to mature and is willing to support its growth by creating two new full-time and two new Graduate Intern positions that solely focus on CI. The two full-time positions will be a CI Director and a CI Coordinator. Even during this downed economy and statewide hiring freeze, Ms. Schmidt is planning to use reserved funds to hire more staff to further develop this project. With these four new positions in place, there will be ample time and resources to implement a new CI evaluation plan.

### **Program Rationale**

Expanding on part of the NCSU SAO mission, “to serve all North Carolina State University students by providing academically well-matched, immersive experiences abroad,” the aim of the CI evaluation plan is to increase student access to degree-relevant study abroad experiences and to better support the evolution of academic curricula across campus through internationalization (“Study Abroad Office Mission Statement,” n.d.). The CI evaluation plan aligns with the NCSU SAO mission by providing the data needed to determine whether or not the CI program is helping to accomplish the SAO mission. It is the means to accomplish many of the SAO and NCSU Strategic Plan goals.

### **Theoretical Foundation**

The history of Curriculum Integration began with the University of Minnesota in the late 1990’s. According to the University of Minnesota website (2011):

The University of Minnesota began a pilot project to test new ways to integrate study abroad into the curricula...This pilot project increased student participation substantially...With encouragement from top administrators, grants were pursued to fund the development of [a] model in a way that could be shared with other institutions.

This University of Minnesota CI model is based on a number of guiding principles and goals. Most of the model’s principles center on collaboration among partners, specifically individuals who interface with students, across the university campus. Executive leadership, faculty, academic advisors, study abroad professionals, and financial aid personnel are all considered to be partners in the Minnesota Model of Curriculum Integration. The “Power of One” is also a key component of the Minnesota Model, which is the idea that it only takes one enthusiastic and significant partner to kick off the CI process for an academic department or college. That partner

might not have the highest rank, but will be passionate about the goals of CI and be willing to work toward them (Ashley, 2011). NCSU follows similar principles by working to identify key contacts in each academic department and college across campus, including deans, directors of undergraduate and graduate studies, academic advisors, and faculty members. Once the SAO distinguishes its key contact from an academic department or college, it works with that person to move through the various phases of the CI process while slowly recruiting others to participate in the initiative. NCSU also works with administrators from both the admissions and financial aid offices to ensure smooth credit transfer, degree audit, and financial aid award processes.

The goals of the Minnesota Model include increased integration of study abroad into all undergraduate majors and minors, additional scholarships for study abroad participants, the enhancement of CI partners' awareness regarding the contribution study abroad makes toward creating global citizens, and a long-term institutional shift toward a more globalized undergraduate experience. A problem with the NCSU CI program is that it only has one main goal, which is to increase access to degree-relevant study abroad programs for students from underrepresented majors without delaying graduation. This Chancellor-driven goal is heavily focused on increasing the number of NCSU students who study abroad instead of concentrating on the actual experiences and life-learning that students gain while studying away. The NCSU SAO is aware and believes that its CI initiatives have the potential to do more than encourage a greater number of students to study abroad. The other objective that the SAO is focused on is shifting the institutional attitude toward globalizing the college experience. No one is assessing the actual quality of the degree-relevant study abroad programs being promoted across campus.

University-wide surveys initially helped the University of Minnesota determine the perceived and real barriers that influence student decisions to study abroad. As the University of

Minnesota website states, “[The] surveys have confirmed what we had known anecdotally, that there is a perception at Minnesota that study abroad costs too much and delays graduation” (“University of Minnesota Model of Curriculum Integration,” 2011). The findings of this survey are referred to as the “5 F’s”: (1) finances, (2) fit, (3) faculty/advisor, (4) fear, and (5) family/friends. These 5 F’s, or factors, are the barriers that most frequently prevent students from studying abroad. When developing its CI methodology, the University of Minnesota took each of these factors into account. “Our Curriculum Integration methodology squarely faces the factors inhibiting study abroad that were indicated in our surveys,” states the University of Minnesota Curriculum Integration webpage (2011). This methodology includes many facets, most of which are comprised in a three phase implementation process called “Assess, Match, Motivate” (“University of Minnesota Model of Curriculum Integration,” 2011). In the Assess phase, preliminary research is executed, including defining learning outcomes and identifying potential study abroad matches for each department. The Match phase involves researching and solidifying curricular matches for each department. And, the Motivate phase consists of developing and distributing resources for potential study abroad participants and outlining communication strategies for each department (“Assess, Match, Motivate,” 2008). The NCSU SAO uses this methodology to implement its own CI project. On the surface, it appears that the application of this methodology at NCSU is working to address four of the five F’s: (1) finances, (2) fit, (3) faculty/advisor, and (4) family/friends (particularly, family). However, it is necessary to do more research to determine which of these barriers are actually removed through the NCSU CI initiatives; or, if these are even the barriers preventing NCSU students from studying abroad in the first place.

In 2004, the University of Minnesota presented its CI model to a number of higher education institutions at the Curriculum Integration Conference in Minneapolis. According to Brenda Van Deusen, a University of Minnesota Master's degree student whose thesis was a case study on curriculum integration efforts across the country, the idea to present on curriculum integration at conferences became an ongoing endeavor for University of Minnesota Study Abroad Office employees. Van Deusen states, "Since 2004, the Curriculum Integration team has continued to offer workshops...presenting the evolving model at national conferences such as NAFSA and the Forum" (2007, p. 7). In order to measure the outcomes of the implementation of the Minnesota Model at other universities, Van Deusen – in partnership with the University of Minnesota CI team – developed the case study project. This project tracks the duplicability and transportability of the model at five institutions across the United States: (1) Oregon State University, (2) University of Wisconsin, Eau Claire, (3) Skidmore College, (4) University of California, San Diego, and (5) Michigan State University. Oregon State University found "that study abroad professionals need to be able to concretely state how study abroad impacts learning outcomes through data collection and research...to be able to assess learning outcomes according to program structure" (Van Deusen, 2007, p. 20). The NCSU SAO could also benefit from creating a learning outcomes assessment tool. The current CI process asks academic advisors and faculty from each department to determine whether or not courses from institutions abroad match program requirements at NCSU. A rubric, which includes both the academic and cultural learning benefits of study abroad, could be a useful course mapping and matching tool.

According to Van Deusen (2007):

The impetus for CI at Skidmore College developed through student experiences. Study abroad returnees reported that their experiences abroad were an extremely valuable

aspect of their undergraduate education, but were not always able to articulate how their study abroad experiences were connected to their academic plan. (p. 25)

On the surface, it seems that the Skidmore CI model was effective: “During the 2001-2002 academic year, 289 students studied abroad. During the 2005-2006 academic year...453 students participated in a study abroad experience” (Van Deusen, 2007, p. 29). This large increase in numbers would be considered a victory at NCSU. However, the case study report does not mention whether or not this is a direct correlation or result of Skidmore’s CI initiatives nor does it mention information about the quality of each student’s study abroad experience.

The University of Wisconsin, Eau Claire, faced many barriers when trying to implement the Minnesota Model across its campus. Faculty members and advisors would often express enthusiasm about CI, but were reluctant to take action. Similarly to the University of Minnesota, the University of California, San Diego had a large budget for CI and they worked to develop a database to obtain and track approved courses from abroad institutions. Yet, even with a large budget, like the University of Wisconsin, the University of California warns offices to be realistic about goals and support from others. According to the case study, the University of California CI initiatives “are moving as slow as molasses” (Van Deusen, 2007, p. 36). The NCSU SAO has experienced some similar slug-paced progress. Each academic department and college has reacted differently to the NCSU CI program. In the beginning of each initiative, most SAO key contacts have been gung-ho about being involved in the CI processes; yet, as each semester progresses, university employees get busy and become slow to take action or respond to communications. Lastly, the CI project at Michigan State University began as a top-down process; but early adopters emerged from meaningful roundtable discussions and helped to move the CI project forward.

The primary message from each of these five universities was the importance of understanding institutional culture and leadership when beginning CI initiatives. As Van Deusen (2007) states, “Just as international education professionals must work to understand and remove student barriers to study abroad, they must also identify potential administrative barriers to the implementation of Curriculum Integration and plan accordingly” (p. 43). Another takeaway from the case studies was the need to set realistic goals and work to identify as many existing resources as possible. Although each institution has similar end goals for their CI initiatives, the journey or process to get there needs to be tailored to each individual university. The Minnesota Model methodologies work well for the University of Minnesota, but one cannot yet determine whether or not they work well for NCSU. For example, “it is evident...that institutions internationalize in different ways and often collaborate to share resources and best practices” (Van Deusen, 2007, p. 11); but, results from outcomes assessments need to be shared. NCSU should begin its assessment practices by carefully examining and test-driving the best practices of other institutions’ CI initiatives. According to the *Guide to Outcomes Assessment in Education Abroad* (Bolen, 2007):

Assessment is essential to teach us how we can improve what we are doing and assist our students to make the most of their time abroad...Assessment is also crucial for raising the standards of the field as a whole. (p. 19)

NCSU should evaluate what is and will work for its own institutional culture.

### **Needs Assessment**

Although study abroad participation at NCSU has risen at a steady pace since its inception, percentages are not academically representative of the institution. For example, while there were 5,559 undergraduate majors in the College of Engineering in 2010-2011, only 117



studied abroad. Although engineering undergraduates comprise over 24 percent of the undergraduate population at NCSU, they comprised just over 11 percent of the study abroad population in the 2008-2009 school year (Appendix A) and only 10.67 percent in the 2010-2011 school year (Appendix B). Significant study abroad underrepresentation also existed within the Colleges of Agriculture and Life Sciences, Education, and Physical and Mathematical Sciences in the 2008-2011 school years. In the 2010-2011 school year, NCSU sent 1,198 students abroad and welcomed 150 incoming exchange students to campus. Of the 1,198 outgoing students, 895 (74.7 percent) studied abroad on summer and short-term programs. The Study Abroad Office manages a robust portfolio of both faculty-led short-term programs and semester-long programs. Increasing the number of students who participate in semester-long exchange programs is a priority for the University.

The NCSU SAO has not yet evaluated the barriers inhibiting NCSU students from studying abroad. The majority of NCSU students are from rural areas across the State of North Carolina. Most of the NCSU student population has never traveled outside of the United States, let alone, outside of North Carolina. Therefore, added incentives, such as connection of study abroad courses to one's major and coursework at NCSU, are often necessary to encourage students to take advantage of the many study abroad opportunities available. It is also important for the NCSU SAO to highlight the cultural benefits of travel and the significance of learning about the world from firsthand experiences. Because of these differences, it might be helpful for the NCSU SAO to determine its own students' barriers to study abroad in order to better tweak its own CI methodologies.

In order to address underrepresented groups in study abroad, the NCSU Study Abroad Office launched its intentional Curriculum Integration strategy in 2008. Utilizing minimal

resources to support a part-time graduate student intern and applying the University of Minnesota model to meet the unique challenges of the campus, NCSU began collaborating with academic departments to integrate study abroad programs into existing underrepresented degree plans. Despite the implementation of the CI program at NCSU, it is currently unknown whether or not the information marketed through the CI program is actually reaching students. If the information is reaching students, there is still no measure of whether or not the CI efforts affect students' study abroad decision-making processes. The SAO claims to focus its CI efforts on "departments where we are most needed, who could stand to really benefit from CI" (Ashley, 2011); but, there is no rubric to define these needs. The NCSU SAO does recognize that each college and department has different needs. Yet, there is no documentation regarding what strategies worked or did not work for each department. According to an email from Ms. Schmidt, the primary reason that SAO staff have yet to evaluate any aspect of the CI program is that "initially there were few resources (both staff time and money) that could be devoted to [CI]. As the project grew...we began to work to identify more resources to continue the growth" (I. Schmidt, personal communication, April 3, 2012). In order to fully determine whether or not the NCSU SAO CI program is accomplishing its purpose, the NCSU SAO needs to create and implement an assessment and evaluation process for its CI program. Ms. Law agrees, "As our resources and time are outlined to increase over the next few years, it will be instrumental that evaluations and assessment are integrated within the initiative" (J. Law, personal communication, April 2, 2012). The *Guide to Outcomes Assessment in Education Abroad* identifies the idea that a meaningful college education should incorporate global components (Bolen, 2007, p. 23). The NCSU SAO now needs to define what those international components

should look like for its students and work to evaluate whether or not they are being accomplished through its CI efforts.

### **Goals and Objectives**

The goals for the creation of a NCSU SAO Curriculum Integration assessment plan are to better increase student access to degree-relevant study abroad experiences, to better support student development abroad, and to better support the evolution of academic curricula across campus through internationalization. The objectives for the creation of a NCSU SAO CI assessment plan include:

1. Increased understanding by the NCSU SAO employees of the barriers keeping students from studying abroad.
2. Ability to define, without speculation, which study abroad programs are actually the best-fit programs for students in specific majors.
3. Increased understanding by NCSU students, administrators, faculty, and staff of the contribution study abroad makes toward creating global citizens.
4. Increased preparedness of NCSU administrators, faculty, and staff to advocate for study abroad across campus.
5. Increased understanding by NCSU SAO employees of the importance of study abroad program assessment and evaluation, specifically related to NCSU curricula and goals.
6. Raised awareness of CI concepts and practices across the NCSU campus.
7. Improved integration of study abroad into NCSU curricula.
8. Dynamic and long-term investment in CI efforts across the NCSU campus and in the NCSU SAO.
9. Dynamic and long-term investment in study abroad across the NCSU campus.

### **Assessment Plan Description**

This CI assessment plan is a comprehensive set of evaluation tools designed to determine the effectiveness and legitimacy of the CI program efforts and to measure the value of the study abroad programs, specifically those promoted through CI efforts, for students in specific majors. As stated above, the hope is that this evaluation design will be transferable to all NCSU academic departments and colleges that participate in the CI program as well as to universities across the United States. Due to various limitations outlined in the guidelines for this paper, where necessary this evaluation plan uses the ISE Department to exhibit examples. The NCSU SAO employees will facilitate the CI program evaluation plan using various approaches, including surveys, focus groups, one-on-one interviews, and other research and data gathering methods. The SAO staff will also analyze the data and distribute the results.

### **Definitions**

Many dictionaries, scholars, and writers define assessment and evaluation differently from one another. Upcraft and Schuh, co-authors of *Assessment Practice in Student Affairs*, define assessment as “any effort to gather, analyze, and interpret evidence which describes institutional, departmental, divisional, or agency effectiveness” (1996, p. 18). They define evaluation as “any effort to use assessment evidence to improve institutional, department, divisional, or agency effectiveness” (1996, p. 19). Upcraft and Schuh see evaluation as the action items that make up the assessment process. Working to define these two terms can be confusing. Many definitions of both words have been proposed and used over time and in a number of contexts. According to Barbara Gross Davis, author of the article *Demystifying Assessment: Learning from the field of Evaluation*, “Today one finds three states [of assessment and evaluation]: that evaluation is a subset of assessment, that assessment is a subset of

evaluation, that evaluation and assessment are converging” (1994, p. 47). Davis goes on to argue, “If a broad definition of assessment is adopted, then assessment and evaluation begin to merge into a common effort” (1994, p. 47). For the purposes of this CI program assessment plan, this paper takes a closer position to Davis’s fourth stance, which synonymously characterizes assessment and evaluation. This paper uses one definition for both assessment and evaluation: the efforts, processes, and analysis methods used to measure effectiveness and worth of all program pieces. In this paper, the assessment and evaluation refer to the measure of the effectiveness of all CI program pieces.

The act of matching specific host institution courses to specific NCSU courses in order to validate direct credit transfer for students who enroll in these course matches while studying abroad is called course mapping. Formalized course mapping is a new concept at NCSU; therefore, not many academic departments and colleges have begun to map courses for their study abroad participants. The idea of course mapping is that faculty members who specialize in specific subject areas have the ability to and will compare host institution curricula with NCSU curricula to determine direct course matches. For example, mechanical engineering professors will evaluate host institution mechanical engineering course curricula to determine whether or not they can reward NCSU mechanical engineering course credit to students who attend these classes abroad. If a host institution class and a NCSU class have similar curricula, the two classes can be identified as a direct course match. Faculty may only match courses in their own areas of expertise; therefore, a mechanical engineering professor cannot, for example, map history curricula.

StudioAbroad is a study abroad database system used by the NCSU SAO and many other study abroad offices across the United States. StudioAbroad houses all information related to

study abroad program logistics, study abroad faculty-led program coordinators, and study abroad student participants. It also functions as the central application tool for students to use when applying to study abroad programs. Students submit their application materials through StudioAbroad, including letters of recommendation, passport copies, transcripts and all other material submission requirements. StudioAbroad also helps Regional Advisors track their advising appointments and stay up-to-date on any issues regarding their advisees. NCSU SAO Regional Advisors distribute surveys to students through StudioAbroad prior to their advising appointments. SAO employees can also generate reports about study abroad participants and programs through StudioAbroad. StudioAbroad is a multifunctional database system and it has the potential to aid the CI evaluation processes.

### **Timeline**

Implementation of the evaluation plan for the CI program will begin in May 2012, with a focus on gathering information related to the academic departments and colleges newly participating in the CI program. The information gathered in this step will include: (1) the percentages of students studying abroad from each academic department and college over the past five years, (2) the limitations discouraging students from these academic departments and colleges from studying abroad, (3) an in-depth overview the curriculum from each academic department and college, and (4) lists of the greatest benefit of study abroad as viewed by faculty from each academic department and college. This information gathering portion of the evaluation plan will help the SAO provide each academic department and college more fitting program match recommendations. The next step of the CI evaluation plan is to include new CI-related survey questions on the mandatory pre-departure and reentry surveys administered to study abroad participants through the NCSU SAO. Students returning from 2011-2012

academic-year and 2012 spring semester study abroad programs will be required to answer these survey questions in order to receive their transcripts. If students do not complete the required survey, the SAO will put a hold on the release of student transcripts, as necessary. Students have been and will always be informed about this required survey prior to beginning their study abroad program. This has never been a problem with the original mandatory survey in the past. The SAO will be able to begin processing results on feedback garnered from these surveys by the beginning of July 2012. The SAO staff who currently work on CI initiatives will begin incorporating aspects of the CI evaluation plan with its CI partners beginning in July 2012, because July 2012 is the start of the next CI program cycle. In the beginning, the implementation of the plan will mostly take place in the form of one-on-one meetings and through surveys. More aspects of the assessment process will be incorporated over time. The CI program assessment plan timeline is meant to be an iterative process. The timeline highlights the most pertinent action items for all aspects of the CI assessment plan, from initializing new partnerships to addressing study abroad barriers to evaluating course matches, and everything in-between (Appendix C). One of the primary challenges of this CI assessment plan will be to maintain the implementation of it continuously. The hope is that as more staff are devoted to work on CI efforts by Ms. Schmidt, these employees will be able to implement and monitor the CI program evaluation plan as it grows and changes over time. It is imperative that the action items occur annually in order to determine the value of the CI program over time.

### **Participants**

At NCSU, academic departments are housed within colleges. The following academic departments are currently participating in the CI program: (1) Agribusiness, (2) Agricultural Sciences, (3) Chemistry, (4) Industrial Systems Engineering, (5) Life Sciences, (6) Mathematics,

(7) Nutrition, (8) Physics, (9) Pre-Med, (10) Pre-Vet, and (11) Physics. The following colleges are currently participating in the CI program: (1) Education, (2) Engineering, (3) Textiles, and (4) Management. By fall 2012, the NCSU SAO plans to begin new CI efforts and to create new partnerships with up to three more academic departments in the College of Engineering and the three academic departments that comprise the College of Natural Resources. Individuals who will participate in the CI evaluation processes include students, academic advisors, administrators, and faculty from academic departments and colleges that choose to partner with the SAO on CI initiatives. SAO staff, OIA staff, and upper-level NCSU administrators will also participate in the evaluation plan. Parents and host institution personnel will also be recruited to participate in small aspects of the CI assessment processes.

### **Assessment Plan Design**

The CI assessment plan design is extremely complex, specifically, because the CI program is broad reaching and includes the involvement of many stakeholders from many academic departments and colleges across the NCSU campus. In order to appropriately evaluate the CI program, the CI assessment plan measures and evaluates a number of the CI program facets. These facets, or components, can be broken down into three general categories: (1) student engagement, (2) program reach, and (3) curricular alignment. The first category, student engagement, mostly encompasses the barriers preventing students from studying abroad and the long-term impact of study abroad on students' career paths. The second category, program reach, is the effectiveness of CI efforts to reach constituents across the NCSU campus, specifically regarding Assess, Match, and Motivate phases of the CI program implementation. The third category, curricular alignment, addresses the quality of classes abroad compared to those offered at NCSU and the preparedness of returned study abroad participants for their next semester classes at NCSU. This third category will be the primary focus of the CI evaluation



plan. Blogs, surveys, interviews, focus groups, and online research will be the methods used to evaluate these CI program facets.

### **Student Engagement**

Both NCSU undergraduate and NCSU graduate students study abroad. Because development occurs in age-linked stages throughout a lifetime, study abroad experiences may affect the development of undergraduate and graduate students differently. The CI program, however, will not heavily impact study abroad participant development,; therefore, it is not a large focus of this part of the evaluation plan. Assessing student engagement in the CI program includes defining the barriers preventing students from studying abroad and evaluating the long-term impact of study abroad on students' career paths.

Using a brief information-gathering survey, the CI evaluation plan works to define the barriers that are prohibiting NCSU students from studying abroad. Every four years, the CI Coordinator will email the survey, to all NCSU students. This survey asks students to rank the five F's from their biggest to their smallest study abroad barrier. The survey also asks students to identify any other barriers that prevented, almost prevented, or are still preventing their participation in study abroad (Appendix D). Results from this survey will help the SAO staff tailor their programs, services, and CI marketing efforts to better meet students' needs. To measure the long-term impact of study abroad experiences on NCSU students, the SAO will email a survey to study abroad alumni every four years. This survey will primarily investigate the impact of study abroad on participants' careers, while also gathering peripheral information about intrapersonal growth. This survey specifically asks alumni to determine whether or not their study abroad experiences influenced their career paths and whether or not they developed skills abroad that they use or have used in their jobs (Appendix E).

**Program Reach**

The NCSU CI program uses aspects of “Assess, Match, Motivate” methodology, derived from the University of Minnesota Model of CI, to implement its own CI program. In the Assess phase, preliminary research is executed, including defining learning outcomes and identifying potential study abroad program matches for each academic department or college. The Match phase involves researching and solidifying curricular matches for each academic department or college. And, the Motivate phase consists of developing and distributing resources for potential study abroad participants and outlining communication strategies for each academic department or college (“Assess, Match, Motivate,” 2008).

Currently there is no process to determine how the NCSU SAO chooses which academic departments and colleges to target as CI partners. To address this, the CI Director will examine NCSU study abroad participant trends by pulling data from StudioAbroad, the SAO database system. At the beginning of every new fiscal year, the CI Director will identify the academic departments and colleges that are most underrepresented in study abroad at NCSU. The CI Director will then compare this list to the study abroad programs offered at NCSU in order to determine which academic departments and colleges the CI program can best serve. After determining which academic departments and colleges to target, the CI Director will then make contact to determine if there is any interest from potential administrator or faculty champions. Currently in the Assess phase, the SAO uses informal discussions to identify academic department and college learning outcome goals for their students participating in study abroad programs. To formalize these goals and to more deliberately guide the primary discussion process, the CI staff will use a pre-set questionnaire during each initial academic department and college meeting. This questionnaire includes nine questions that address various aspects of CI

and study abroad, including: (1) academic department and college-specific goals, (2) academic department and college-specific course and curriculum information, and (3) location and program logistic information (Appendix F). Answers gathered from this questionnaire will help CI employees to better identify suggested best-fit study abroad programs for students in each major during the Match phase. More information about the Match phase is discussed in the “Curricular Alignment” section, below.

The Motivate phase consists of developing and distributing resources for potential study abroad participants and outlines communication strategies for each academic department or college. Communication strategies include the development and distribution of major-specific resources and the training of administrators, advisors, faculty, and staff to be knowledgeable champions for study abroad. During the Motivate phase, the current CI Graduate Intern develops and distributes major-specific brochures for individual academic departments and colleges. These brochures provide an outline of the “next steps” to study abroad and an overview of the best-fit study abroad programs for students in a specific major (Appendix G). Academic department and college CI partners determine the best-fit study abroad programs listed on these brochures. These brochures also provide a brief background of the major-specific benefits of study abroad.

In this phase, the CI employees also work with academic advisor and faculty partners to help them become knowledgeable champions of study abroad. When meeting with students in advising sessions or in class, the goal is to encourage the academic advisors and the faculty members to advocate for study abroad. In order to measure whether or not the information distributed through these CI program efforts is reaching students, two survey questions will be integrated into the mandatory General Advising Worksheet that students are required to fill out

prior to studying abroad. These questions will focus on how the student heard about study abroad and what or who motivated the student to study abroad. Informal discussions and focus groups with academic advisor and faculty partners will also help determine how the CI division can better prepare them to promote study abroad within their academic departments and college.

### **Curricular Alignment**

As stated above, the Match phase of the CI program process involves researching and solidifying study abroad curricular matches for each academic department and college partner. Currently, the Match phase begins directly after the initial informal CI partner discussions are complete. After the initial discussions, the CI Graduate Intern sets up meetings with each SAO Regional Advisor to determine which programs offer courses in the specific major being considered. From these meetings, the CI Graduate Intern creates an initial list of potential best-fit study abroad programs for the academic department or college partner to review based on various factors, including: (1) the number of major-specific classes offered at the host institution, (2) the language of instruction of most classes taught at the host institution, and (3) the potential major-specific internship, research, and service-learning opportunities offered through the host institution. The CI Graduate Intern, then, compiles this list of program recommendations on a document to send to the CI partners for review. This suggested list of best-fit study abroad programs also includes links to each host institution's homepage, each host institution's course catalogue, and an expanded academic overview for each host institution (Appendix H). The expanded academic overview for each host institution includes more detailed information about each host institution, including lists of course offerings and information about housing (Appendix I). Depending on the enthusiasm and responsiveness of the academic department and college partners, the initial list of program suggestions may contain anywhere from five to 20

academic year and semester program recommendations. Once the list of potential best-fit study abroad programs has been compiled, the CI Graduate Intern emails it to the key contacts in the partner academic department or college. Advisor and faculty partners review the information provided. While performing this review, the advisors and faculty members work to cut down the list of study abroad program recommendations for their students based on their own assessment of the host institutions' curricula in comparison with their own department's curriculum at NCSU. After each list is pared down, the current CI Graduate Intern creates the major-specific marketing materials to distribute to students.

Course mapping is the theoretical next step in the Match phase. Course mapping is the act of matching specific host institution courses to specific NCSU courses in order to validate direct credit transfer for all students who enroll in these matched courses while abroad.

Although all past and current CI partners took the time to pare down their initial program match lists by examining each host institution's curricula, only one NCSU academic department, the ISE Department, took the next step by participating in the formal course mapping process.

According to the ISE Director of Undergraduate Studies, Anita Vila-Parish, the course mapping process was not too laborious (A. Vila-Parish, personal communication, April 18, 2012):

Obtaining copies of the host institutions' course syllabi was key to successfully mapping courses back to classes at NCSU. Otherwise, the process was simple. After reading each class syllabus, it was easy to determine whether or not a course matched our own ISE course here at State.

There are four semester-long study abroad program recommendations for ISE students. Dr. Vila-Parish mapped courses for three of the four programs for a total of 21 study abroad course matches. These course matches are communicated to ISE students on the SAO website and are

displayed on a handout made by the current CI Graduate Intern. This handout provides information about each of the study abroad programs recommended by the ISE department for its students and it directly maps out the course matches for each program (Appendix J). ISE students have extremely strict course requirements during their four years at NCSU. While their study abroad program options are limited, these pre-defined course matches enable ISE students to better plan for and fit study abroad into their eight semester course schedules.

In the past, other academic departments and colleges have opted out of the formal course mapping process, instead determining whether or not to approve student-requested study abroad course matches on an individual basis. Some academic departments and colleges do track these individual study abroad course approvals in order to make the process more seamless from student to student, but recordkeeping is not required by NCSU or the SAO. Many advisors and faculty members also award students unspecific course credit at a course level, versus providing a direct match. For example, a student who takes a Mechanical Engineering course abroad might receive credit for a 200-level Mechanical Engineering class (i.e. MAE 2\*\*), versus receiving credit for a specific Mechanical Engineering course (i.e. Engineering Dynamics, MAE 208). Despite the current lack of formal study abroad course match approvals, returned NCSU study abroad participants usually receive some sort of credit for the classes they complete while abroad. Yet, these credit approvals do not verify the quality of the courses offered by host institutions or their alignment with NCSU curricula. Further, because this course approval process is not formalized, two students who take the same class at the same host institution abroad may or may not receive the same NCSU transfer credit for the course.

The lack of academic department and college participation in the formal course mapping processes can be attributed to several factors, including but not limited to the amount of time it

takes to research and match courses, an already over-cumbersome workload, and the limited resources available to aid in the course mapping process. In the long run, course mapping has the potential to decrease advisor and faculty workloads by limiting the number of individual study abroad course approvals they manage each semester. Pre-mapped study abroad courses will automatically be approved and transferred by the SAO and by the Office of Registration and Records. In order to encourage more advisor and faculty participation in the course mapping process, the CI staff will need to determine the primary factors that are inhibiting academic advisor and faculty participation in the process. Then, the CI staff will need to take a more hands-on approach in guiding and supporting their partners through the entire process.

To improve study abroad program curriculum alignment, the CI evaluation plan will help formalize the course mapping and the course approval processes for all CI academic department and college partners. Firstly, CI Division employees will encourage all CI partners to complete the course mapping processes of the CI Match phase. To better support this process, the CI Coordinator and the CI Graduate Interns will compile host institution syllabi for all possible corresponding study abroad course matches. The CI staff will also work to translate syllabi that are written in languages other than English. CI employees will also track the study abroad matches by creating a course equivalency database. Academic advisors, faculty, and students will be able to search this database to lookup previously approved study abroad course matches. This will help stakeholders to avoid extra work and prevent them from needing to reinvent the wheel. The course equivalency database will be searchable by several search terms, including: (1) country, (2) city, (3) host institution, (4) host institution course, (5) NCSU course, (7) NCSU academic department, and (8) NCSU college. The course approvals listed in the course

equivalency database will expire after five years. This expiration date will help keep course approvals current and up-to-date with changing course content.

At NCSU, as is outlined in the *Guide to Outcomes Assessment in Education Abroad* (Bolen, 2007), “Assessment of learning outcomes in disciplinary knowledge... would take place within the course context, through assignments and grades” (p. 66); however, the SAO needs to be sure that the programs highlighted through CI are actually providing students with a quality education. To measure the quality of host institution courses, the CI staff will distribute a survey to students from CI partner academic departments and colleges that focuses on feelings of academic preparedness after returning from abroad. This survey will be distributed during the middle of the returned students’ first semester back at NCSU. The CI staff will also distribute a survey to faculty from CI partner academic departments and colleges, who are teaching returned study abroad participants, which examines student preparedness for class after their return from abroad. This survey will also be distributed during the middle of the returned students’ first semester back at NCSU. Informal discussions and focus groups will also be used to gather information from students and faculty on study abroad program curricula alignment and host institution course quality.

The CI staff will also compile reports and monitor the grades of returned study abroad students, specifically at the end of their first semester back at NCSU. From these reports, the CI staff will be able to compare returned study abroad students’ grades with the grades of students who did not study abroad. For example, this study will compare the grades of students who take ISE 216 at Hong Kong Polytechnic and then take ISE 316 at NCSU with the grades of students who take both classes in subsequent semesters at NCSU. From these reports, the SAO will be able to determine whether or not returned study abroad students fall during their time abroad.



### **Staffing Plan**

In the past 15 years, the NCSU SAO has grown rapidly and continues to expand at an increasingly fast rate. The NCSU SAO consisted of three employees when the current SAO Director, Ingrid Schmidt, began working for the office in 1996. Today, the office consists of 13 full-time employees and five graduate student interns. Until a few years ago, the SAO was located in the basement of a male dorm on the outskirts of campus. Now, the SAO is located in a new building, down the street from the student union, in the heart of campus. In just the few short years since the move to the new office, the SAO staff has outgrown the new location. To accommodate this growth, the department that was located across the hall from the new SAO was relocated to another building on campus. Offices from the moved department have been allocated to the SAO as well as to the Office of International Affairs (OIA). The SAO is housed under the OIA. The Vice Provost of International Affairs, Dr. Bailan Li, heads the OIA and is the SAO link to the NCSU upper administration. This summer, the OIA in conjunction with the SAO is planning to create a new Curriculum Integration department. This department will consist of two new full-time employees and two new graduate interns. From these changes and from the SAO's new proximity to upper-level management, it is clear that study abroad is a highly regarded priority of the NCSU upper administration.

The organizational structure of the NCSU SAO is mostly linear, but includes some hierarchical aspects in its composition. As displayed in the NCSU SAO organizational chart (Appendix K), Dr. Li is the chief executive of the SAO. According to the OIA website, "Dr. Li is the university-level officer for international and global education initiatives" ("About OIA: Home," n.d.). Ms. Schmidt reports directly to Dr. Li. According to the Study Abroad Office website, "As Director of Study Abroad, [Ms. Schmidt] develops and implements policies related

to credit-bearing international programs, and oversees program development and operations” (“Staff,” n.d.). Ms. Schmidt is also the Associate Vice Provost for International Affairs. In this role, Ms. Schmidt works closely with Dr. Li to integrate global perspectives into all aspects of the NCSU mission.

Under Ms. Schmidt is Kim Priebe, Associate Director of Study Abroad. Ms. Priebe manages two Assistant Directors and the Regional Advisor team. She is also responsible for the risk management policies and procedures for all study abroad programs offered by the NCSU SAO. The two Assistant Directors in the SAO have heightened responsibilities. One Assistant Director heads the Curriculum Integration project and the other manages the SAO marketing initiatives. Both Assistant Directors are also responsible for various study abroad regions. Somewhat lateral to the Assistant Directors are the Regional Advisors. The Regional Advisors are each responsible for managing study abroad programs in their assigned regions. These Advisors help create faculty led programs as well as lead study abroad applicants through the study abroad advising and application processes. Both the Assistant Directors and the Regional Advisors supervise Graduate Interns. The SAO Graduate Interns work on projects associated with their supervisors’ responsibilities. The last pieces of the organizational puzzle are the Operations staff. They are responsible for the financial and human resource sections of the SAO.

Due to the linear nature of the NCSU SAO organizational chart, the SAO employees are extremely collaborative; however, there is no cross training between positions and there is no overlap between roles. This organizational structure defines clear divisions of responsibilities. CI is incorporated into this organizational structure through an Assistant Director and a Graduate Intern position. The individuals in these positions manage and administer the CI program. Their primary responsibilities in regard to CI include: 1) identifying and developing degree-relevant

study abroad programs for students in under-represented disciplines, 2) creating and maintaining partnerships for collaboration on the implementation of the CI program both across campus and around the world, and 3) developing the short- and long-term CI program strategic plans. As the CI program grows, the SAO will create a new CI Department including two full-time and two Graduate Intern positions. The two full-time positions will include a CI Director and a CI Coordinator. This division will focus solely on CI efforts. The creation of these new roles will take place by August 2012, allowing the CI program to expand more rapidly across the NCSU campus. The implementation of the CI evaluation plan will also be feasible with these new resources allocated to CI.

### **Marketing Plan**

Marketing of the CI assessment plan is twofold. First, marketing the importance of the CI assessment plan is imperative to encourage students, administrators, faculty, and staff to participate in the CI evaluation processes. Although upper level NCSU administrators and SAO employees consider participation in the CI program to be a campus-wide commitment, stakeholders at the academic department and college levels do not necessarily deem their involvement as a priority. Faculty, staff, and students are often swamped with other work and need convincing to participate in alternative programs such as CI. Second, marketing is necessary to effectively convey the CI assessment results across campus. When dispersing information such as this (Bolen, 2007):

The manner in which you communicate your results will depend very much upon the results themselves, the audience, and the purpose of communication...Communication with senior administrators, government officials, other departments on campus, study abroad faculty and staff, or members of the field may all take different forms and produce

different outcomes. (p. 83)

Much of the current and future CI finances come from various discretionary funds; therefore, it is pertinent to prove the value of the CI program, especially as it progresses, in order to keep it going. Marketing efforts will help convey the importance of CI program at NCSU to funders and fund allocators.

Marketing to both encourage participation in the CI evaluation processes and to disseminate the CI assessment results will take the shape of formal communications, specifically through email, one-on-one meetings, presentations, telephone conversations, and typed letters. Most of the marketing efforts will target specific stakeholders. Further, there is a Curriculum Integration webpage housed on the NCSU SAO website, which provides information about CI to all University constituents and to the public. It highlights the best-fit study abroad programs for students in specific academic departments and colleges. Once the CI assessment plan is implemented, this page will provide information regarding the ongoing CI assessment results.

### **Participant Recruitment**

Many avenues will be used to recruit participants for the CI program assessment plan components. Recruitment will target participation by individuals and stakeholders from academic departments and colleges that are interested in or that currently participate in the CI program, including: (1) students, (2) parents, (3) academic advisors, (4) administrators, and (5) faculty. Recruitment will also target participation by individuals and stakeholders from international host institutions, including: (1) faculty and (2) international student and scholars office employees. Recruitment will concentrate on host institutions that have been identified or might be considered as best-fit programs for students from NCSU CI partner academic departments and colleges. All individuals involved in CI efforts will be both encouraged and

allowed to participate in any of the evaluation pieces that relate to their roles. Regional Advisors will also gather information from students about CI in the one-on-one advising sessions they currently have with semester and year-long study abroad program participants. Questions about CI will be added to the advising session checklist. Academic advisors, administrators, faculty, host institution staff, and parents will be strongly encouraged to participate in the CI evaluation processes. All CI constituents will be recruited using personal communication methods as well as at CI meetings and presentations.

### Budget

EXPENSES	Fixed Costs		Variable Costs				In-Kind Contributions	Totals
	Cost	Quantity Over Time	Cost	Units	Quantity	Total		
<b>ADMINISTRATIVE COSTS</b>								
Communications	\$2,000	per year						\$2,000
Marketing Materials	\$7,000	per year						\$7,000
Supplies	\$6,000	per year						\$6,000
<b>STAFF EXPENSES</b>								
Curriculum Integration Director	\$12,000	per year						\$12,000
Curriculum Integration Coordinator	\$15,750	per year						\$15,750
Curriculum Integration Graduate Intern	\$4,200	2 per year						\$8,400
<b>MISCELLANEOUS EXPENSES</b>								
Focus Group Funds			\$10	per participant	50	\$500	\$200	\$300
Research Materials	\$2,000	per year						\$2,000
<b>SUBTOTAL</b>								<b>\$53,450</b>
Indirect Expenses								\$10,690
<b>TOTAL EXPENSES</b>								<b>\$64,140</b>

REVENUES	Fixed Costs		Variable Costs				In-Kind Contributions	Totals
	Cost	Units	Cost	Units	Quantity	Total		
<b>CONTRIBUTIONS AND FEES</b>								
Discretionary Funds	\$36,150	per year						\$36,150
Study Abroad Office Budget	\$28,030	per year					200	\$28,230
<b>TOTAL REVENUE</b>								<b>\$64,380</b>

### Budget Notes

The administrative costs associated with the CI assessment plan include communications, marketing materials, and supplies. Communications primarily include telephone calls to host institutions and the monthly cost of connecting to the Internet. Marketing materials include

informational brochures that showcase the CI evaluation results as well as potential marketing materials mailed to students and parents encouraging them to participate in pieces of the CI assessment plan. The staff expenses associated with the CI assessment plan were calculated by determining the percent of each CI employee's time that will be allocated to work on the CI evaluation. The CI Director will earn 60,000 dollars per year and spend 20 percent of his or her time on the evaluation plan. The CI Coordinator will earn 45,000 dollars per year and spend 35 percent of his or her time on the CI evaluation plan. And, the Graduate Interns will earn 12,000 dollars per year and spend 35 percent of their time on the CI evaluation plan. The two full-time employees' benefits will be covered by the OIA budget. The focus group funds will be used to order food for participants who attend focus groups. The research materials include the annual subscription cost to join SurveyMonkey.com. This line item may also be used to help staff attend conferences related to CI or higher education assessment practices. The indirect expenses are calculated as 20 percent of the total expenses. Upon approval by the OIA, the SAO will use its discretionary fund to create the four new CI positions.

### **Evaluation of the Assessment Plan**

Each summer, the SAO CI staff will review the CI evaluation plan to determine its effectiveness. The CI employees will specifically examine the ability of the assessment plan tools to gather appropriate and relevant information. The staff will also work to determine whether or not the CI assessment plan is reaching its goals and objectives. Focused and meaningful discussion will facilitate the evaluation of each aspect of the assessment plan.

### **Conclusions and Implications**

Developing an understanding of the barriers preventing students from studying abroad will allow the SAO staff to address these issues prior to complete rejection by students of the

opportunity to study abroad. Streamlined course mapping will more easily allow students to determine how to fit study abroad into their degree audits and to more fairly and seamlessly transfer their study abroad courses back to NCSU. The CI evaluation plan will also allow the NCSU SAO staff to recommend best-fit study abroad programs for students in specific majors without any hesitation or speculation. Thorough research and assessment will provide the information necessary to determine the best-fit study abroad programs for each new CI partner. As a whole, the CI evaluation plan is a means to accomplish many of the SAO and NCSU Strategic Plan goals by encouraging NCSU students to take advantage of global engagement opportunities abroad.

The creation of this evaluation plan includes two primary limitations: (1) the size and scope of the assessment plan versus the Capstone paper guidelines and (2) the inability to collaborate more with CI stakeholders on the assessment plan design. The CI program is an extremely large-scale project that spans across the entire NCSU campus. It involves a number of academic department and college stakeholders. In order to truly develop a comprehensive and thorough CI evaluation plan, the plan needs to stretch beyond the borders created through the SIT Capstone guidelines. Additionally, the SIT Capstone guidelines state that the student must individually develop his or her Capstone project; however, this CI evaluation design could benefit from collaboration with SAO employees and CI constituents. Looking forward, input from various CI stakeholders has the potential to provide additional perspectives on the design of the assessment. Further, due to the time and resource limitations outlined in this Capstone project, the SAO budget in this paper was fashioned from assumptions. It is not the actual SAO program budget.

My future role in the NCSU SAO CI program is uncertain. My practicum as the Curriculum Integration Coordinator, Graduate Intern ends on May 16, 2012. Currently, Ms. Schmidt, Ms. Priebe, and Ms. Law are writing the new CI position descriptions. They are hoping to fill the two new full time and two new Graduate Intern positions by the beginning of August 2012. However, I am applying and interviewing for other positions in the meantime. Whether or not the NCSU SAO and I decide to have me continue working on the CI program at NCSU, I have been and will continue to share aspects of this evaluation plan with the NCSU SAO. I have already met with some SAO staff members to discuss this plan. We have additional meetings scheduled between now and my last day as a Graduate Intern. Ms. Law is hoping to begin implementing various aspects of this evaluation plan this summer. I will also provide Ms. Schmidt, Ms. Priebe, and Ms. Law with copies of this paper.

Assessment of the NCSU SAO CI program is critical to help determine its effectiveness. The evaluation plan will define which CI processes and procedures work and which need improvement. Evaluation is critical to the effectiveness of the CI program at NCSU. However, the evaluation plan will only be useful if the results are issued both internally to the SAO and externally to the entire NCSU campus. According to the *Guide to Outcomes Assessment Abroad* (Bolen, 2007), “The results of outcomes assessment have the potential to not only transform education abroad but to change higher education itself” (p. 229). Through meaningful assessment of the CI program more NCSU students will be able to study abroad on academically relevant study abroad programs and become global citizens.



### References

- Ashley, B. (2011). *CI Interview*. Retrieved from: NCSU K:\drive
- Bolen, M. C. (Ed.). (2007). *A guide to outcomes assessment in education abroad*. Carlisle, PA: The Forum on Education Abroad.
- Davis, B. G. (1994). Demystifying assessment. In J. S. Stark & A. Thomas (Eds.), *Assessment and Program Evaluation* (pp. 45-57). Boston: Pearson Custom Publishing (ASHE Reader Series). Retrieved from:  
[http://courses.worldlearning.org/file.php/1340/Demystifying\\_Assesment\\_1\\_.pdf](http://courses.worldlearning.org/file.php/1340/Demystifying_Assesment_1_.pdf)
- Fischer, K. (2010). Internationalized academe is inevitable, but its form is not, says Arthur Levine. *The Chronicle of Higher Education*. Retrieved from:  
<http://chronicle.com/article/Internationalized-Academe-Is/64230/>
- Forum on Education Abroad. (n.d.). *A guide to outcomes assessment in education abroad*. Retrieved from: [http://www.forumea.org/research-outcomes\\_assess\\_guide.cfm](http://www.forumea.org/research-outcomes_assess_guide.cfm)
- Hindman, N. C. (2011). The 10 poorest countries in the world: Oxford university-U.N. *Huffington Post*. Retrieved from: [http://www.huffingtonpost.com/2010/08/03/the-10-poorest-countries\\_n\\_668537.html#s121698&title=3\\_Mali](http://www.huffingtonpost.com/2010/08/03/the-10-poorest-countries_n_668537.html#s121698&title=3_Mali)
- Kuh, G. & Ikenberry, S. (2009). *More than you think, less than we need: Learning outcomes assessment in American higher education*. Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA). Retrieved from: <http://www.learningoutcomeassessment.org/documents/fullreportrevised-L.pdf>
- LessonCast. (n.d.). *STEM Education Matters: Resources, Stats and Infographics*. Retrieved from: <http://lessoncast.org/2011/12/why-stem-education-matters-resources-and-statistics/>

North Carolina State University. (2012). NC State Selected Facts. Retrieved from:

<http://www2.acs.ncsu.edu/UPA/fastfacts/quick.htm>

North Carolina State University. (n.d.). Study Abroad – Facts & Figures. Retrieved from:

[http://studyabroad.ncsu.edu/index.cfm?FuseAction=Abroad.ViewLink&Parent\\_ID=61DCCE02-110A-9DE8-736B89566582E1B6&Link\\_ID=29C8AE2D-110A-9DE8-73EA573C17283C8E&pID=11&IID=53](http://studyabroad.ncsu.edu/index.cfm?FuseAction=Abroad.ViewLink&Parent_ID=61DCCE02-110A-9DE8-736B89566582E1B6&Link_ID=29C8AE2D-110A-9DE8-73EA573C17283C8E&pID=11&IID=53)

North Carolina State University. (n.d.). Study Abroad – Major Specific Info – Curriculum Integration. Retrieved from: <http://studyabroad.ncsu.edu/?go=curriculumintegration>

North Carolina State University. (n.d.). Study Abroad – Major Specific Info – For Faculty and Administrators. Retrieved from:

<http://studyabroad.ncsu.edu/?go=forfacultyandadministrators>

North Carolina State University. (n.d.). Study Abroad – Major Specific Info – Major-Specific Resources. Retrieved from: <http://studyabroad.ncsu.edu/?go=majorspecificresources>

North Carolina State University. (n.d.). Study Abroad – Study Abroad Office Mission Statement. Retrieved from:

[http://studyabroad.ncsu.edu/index.cfm?FuseAction=Abroad.ViewLink&Link\\_ID=110C8FBA-110A-9DE8-73931032F6AFA2A1&Parent\\_ID=61DCCE02-110A-9DE8-736B89566582E1B6](http://studyabroad.ncsu.edu/index.cfm?FuseAction=Abroad.ViewLink&Link_ID=110C8FBA-110A-9DE8-73931032F6AFA2A1&Parent_ID=61DCCE02-110A-9DE8-736B89566582E1B6)

North Carolina State University. (2011). The pathway to the future. Retrieved from:

<http://info.ncsu.edu/strategic-planning/pathway-to-the-future/>

North Carolina State University. (2011). The pathway to the future. Retrieved from:

<http://info.ncsu.edu/strategic-planning/pathway-to-the-future/>

SIT Graduate Institute. (n.d.). *Application for Exemption from Review of Human Subjects*

*Research*. Retrieved from:

<http://courses.worldlearning.org/mod/forum/discuss.php?d=39122>

University of Minnesota. (2008). Assess, Match, Motivate. Retrieved from: [http://old-](http://old-lac.gps.umn.edu/ci/academicUnits/assessMatchMotivate.html)

[lac.gps.umn.edu/ci/academicUnits/assessMatchMotivate.html](http://old-lac.gps.umn.edu/ci/academicUnits/assessMatchMotivate.html)

University of Minnesota. (2011). Curriculum Integration History and Impact. Retrieved from:

<http://umabroad.umn.edu/professionals/curriculumintegration/general/history.php>

University of Minnesota. (2011). University of Minnesota Model of Curriculum Integration.

Retrieved from:

<http://umabroad.umn.edu/professionals/curriculumintegration/general/minnesotamodel.php>

Upcraft, M. L., & Schuh, J. H. (1996). *Assessment in student affairs: A guide for practitioners*.

San Francisco: Jossey-Bass.

Van Deusen, B. G. (2007). *Moving beyond marketing study abroad: Comparative Case Studies*

*of the implementation of the Minnesota model of curriculum integration. A Five College Report (2006-2007)*. Retrieved from:

[http://global.umn.edu/icc/documents/moving\\_beyond\\_mktg\\_case\\_studies.pdf](http://global.umn.edu/icc/documents/moving_beyond_mktg_case_studies.pdf)

Woodruff, G. A. (2009). *Curriculum integration: Where we have been and where we are going*.

*Internationalizing the Curriculum and Campus Paper Series*. Retrieved from:

[http://cdesign.com.au/isana2011/pdf\\_woodruff\\_paper.pdf](http://cdesign.com.au/isana2011/pdf_woodruff_paper.pdf)

## Appendix A

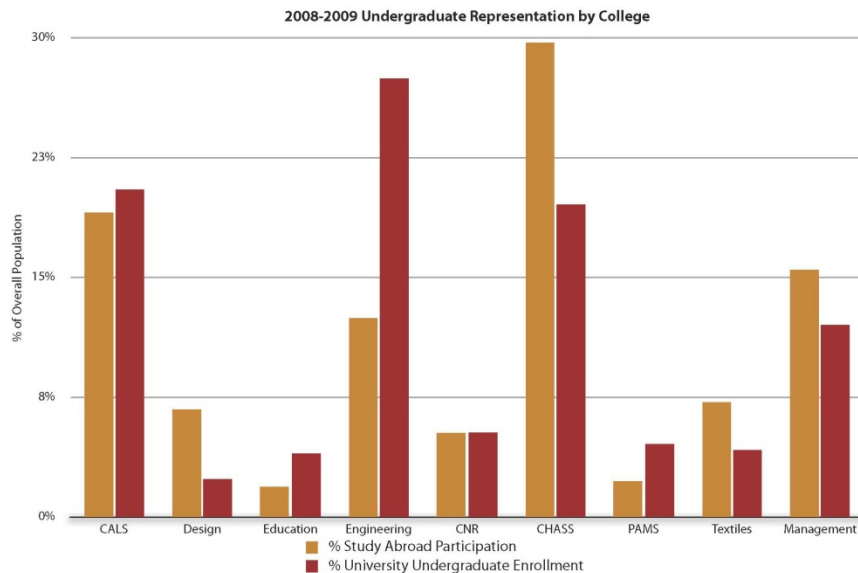
### Undergraduate Enrollment in Study Abroad Programs BY COLLEGE 2008-2009

Total number of NC State *undergraduate degree* students studying abroad: 810  
 Estimated %\* of NC State *undergraduate degree* students who study abroad: 17.5%  
 Spring 2009 *undergraduate headcount* enrollment: 23,244

College	Estimated % of undergraduate degree students in the college who participate in at least one study abroad program by the time they graduate**	# of study abroad participants who are undergraduate majors* in the college	# of students who are undergraduate majors* in the college
AGRICULTURE & LIFE SCIENCES	19.7%	170	4,219
DESIGN	53.6%	60	490
EDUCATION	10.5%	17	818
ENGINEERING	11.4%	111	5,648
NATURAL RESOURCES	18.4%	47	1,089
HUMANITIES & SOCIAL SCIENCES	22.4%	265	4,027
PHYSICAL & MATHEMATICAL SCIENCES	8.2%	20	942
TEXTILES	41.6%	64	862
MANAGEMENT	21.0%	138	2,476
FIRST YEAR COLLEGE	N/A	8	1,144

\* Students with two declared majors are included in the totals for *both* colleges. Therefore the current sum of the college subtotals will be higher than the actual number of students who went abroad and who are included in the undergraduate headcount enrollment.

\*\* This figure is calculated by comparing the number of undergraduate participants in study abroad in 2008-2009 with the number of undergraduate degree recipients in 2008-2009. Although this method produces only an approximate measure of study abroad participation, it is the method currently used in the Institute for International Education Open Doors annual survey. The Open Doors survey is the only national data collection reporting system for study abroad participation by U.S. students, and is endorsed by the Section on U.S. Students Abroad of NAESA: Association of International Educators.



(“Facts & Figures,” n.d.)

## Appendix B

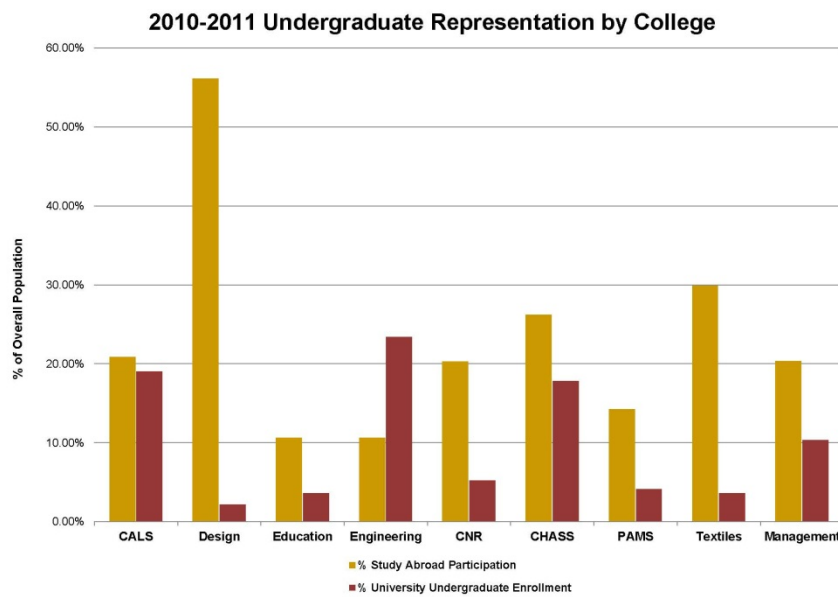
### Undergraduate Enrollment in Study Abroad Programs BY COLLEGE 2010-2011

Total number of NC State *undergraduate degree* students studying abroad: 1051  
 Estimated %\*\* of NC State *undergraduate degree* students who study abroad: 20.3%  
 Spring 2011 undergraduate headcount enrollment: 23,752

College	Estimated % of undergraduate degree students in the college who participate in at least one study abroad program by the time they graduate**	# of study abroad participants who are undergraduate majors* in the college	# of students who are undergraduate majors* in the college
AGRICULTURE & LIFE SCIENCES	20.85%	215	4,526
DESIGN	56.15%	73	518
EDUCATION	10.63%	22	864
ENGINEERING	10.67%	117	5,559
NATURAL RESOURCES	20.30%	67	1,243
HUMANITIES & SOCIAL SCIENCES	26.24%	338	4,234
PHYSICAL & MATHEMATICAL SCIENCES	14.29%	28	977
TEXTILES	29.90%	61	867
MANAGEMENT	20.38%	141	2,462
FIRST YEAR COLLEGE	N/A	4	1,278

\* Students with two declared majors are included in the totals for *both* colleges. Therefore the current sum of the college subtotals will be higher than the actual number of students who went abroad and who are included in the undergraduate headcount enrollment.

\*\* This figure is calculated by comparing the number of undergraduate participants in study abroad in 2010-2011 with the number of undergraduate degree recipients in 2010-2011. Although this method produces only an approximate measure of study abroad participation, it is the method currently used in the Institute for International Education Open Doors annual survey. The Open Doors survey is the only national data collection reporting system for study abroad participation by U.S. students, and is endorsed by the Section on U.S. Students Abroad of NAFSA: Association of International Educators.



(“Facts & Figures,” n.d.)

## Appendix C

### CI Assessment Plan Timeline

<b>April 2012</b>	<ul style="list-style-type: none"> <li>• Examine study abroad participant trends in StudioAbroad</li> <li>• Research potential new CI academic department and college partners</li> <li>• Recruit potential new CI academic department and college partners</li> </ul>
<b>May 2012</b>	<ul style="list-style-type: none"> <li>• Identify new and existing CI academic department and college partners</li> <li>• Begin information gathering process, specifically for new program partners</li> </ul>
<b>June 2012</b>	<ul style="list-style-type: none"> <li>• Distribute reentry survey, including CI questions, to returned academic year and spring semester study abroad participants</li> <li>• Distribute parent survey</li> <li>• Distribute host institution survey</li> </ul>
<b>July 2012</b>	<ul style="list-style-type: none"> <li>• Analyze the student reentry, parent, and host institution survey results</li> <li>• Begin one-on-one meetings with both new and existing CI partners</li> <li>• Distribute initial CI surveys to both new and existing CI partners</li> </ul>
<b>August 2012</b>	<ul style="list-style-type: none"> <li>• Analyze the initial CI survey results to determine direction and goals for the both the new and existing CI partners for the 2012-2013 school year</li> <li>• Begin the study abroad program matching and study abroad course mapping process for all CI partners in the Assess phase</li> </ul>
<b>September 2012</b>	<ul style="list-style-type: none"> <li>• Distribute study abroad barriers survey to all NCSU students (every four years)</li> <li>• Distribute study abroad career impact survey to NCSU alumni (every four years)</li> <li>• Continue the Assess, Match, and Motivate phases for all CI partners</li> </ul>
<b>October 2012</b>	<ul style="list-style-type: none"> <li>• Continue the Assess, Match, and Motivate phases for all CI partners</li> </ul>
<b>November 2012</b>	<ul style="list-style-type: none"> <li>• Continue the Assess, Match, and Motivate phases for all CI partners</li> </ul>
<b>December 2012</b>	<ul style="list-style-type: none"> <li>• Distribute class preparedness survey to faculty and students</li> <li>• Distribute reentry survey, including CI questions, to returned fall semester study abroad participants</li> <li>• Continue the Assess, Match, and Motivate phases for all CI partners</li> </ul>
<b>January 2013</b>	<ul style="list-style-type: none"> <li>• Analyze the class preparedness survey results</li> <li>• Analyze the student reentry survey CI question results</li> <li>• Recruit administrator, faculty, and student participants for CI focus groups</li> <li>• Continue the Assess, Match, and Motivate phases for all CI partners</li> </ul>
<b>February 2013</b>	<ul style="list-style-type: none"> <li>• Reconvene with CI partners to for one-on-one check-in discussions</li> <li>• Hold CI focus groups</li> <li>• Continue the Assess, Match, and Motivate phases for all CI partners</li> </ul>
<b>March 2013</b>	<ul style="list-style-type: none"> <li>• Analyze the discussion and focus group results</li> <li>• Continue the Assess, Match, and Motivate phases for all existing CI partners</li> </ul>
<b>April 2013</b>	<ul style="list-style-type: none"> <li>• Examine study abroad participant trends in StudioAbroad</li> <li>• Research potential new CI academic department and college partners</li> <li>• Recruit potential new CI academic department and college partners</li> <li>• Continue the Assess, Match, and Motivate phases for all existing CI partners</li> </ul>
<b>May 2013</b>	<ul style="list-style-type: none"> <li>• Identify new and existing CI academic department and college partners</li> <li>• Begin information gathering process, specifically for new program partners</li> <li>• Continue the Assess, Match, and Motivate phases for all existing CI partners</li> </ul>
<b>June 2013</b>	<ul style="list-style-type: none"> <li>• Reassess the recommended study abroad program and study abroad course matches based on discussion, focus group, and survey results gathered throughout the year</li> <li>• Evaluate the CI assessment plan for necessary changes and updates</li> <li>• Repeat items listed in June 2012 timeline box</li> </ul>
<b>July 2013</b>	<ul style="list-style-type: none"> <li>• Draft campus-communication with pertinent information regarding the CI assessment results</li> <li>• Repeat items listed in July 2012 timeline box</li> </ul>
<b>August 2013</b>	<ul style="list-style-type: none"> <li>• Distribute campus-communication with the CI assessment results</li> <li>• Repeat items listed in August 2012 timeline box</li> </ul>

**Appendix D**

**Survey: Barriers to Study Abroad**

This survey is anonymous. If you have questions about it, please contact the Curriculum Integration Program Coordinator, [saoprogrscicc@ncsu.edu](mailto:saoprogrscicc@ncsu.edu).

**Please complete the following information:**

1. Academic Department:
2. Year in School:
3. Did you or are you planning on studying abroad during your time at North Carolina State University:
  - a. If so, where:
  - b. If so, when:

**Below is a list of five factors that often discourage students from studying abroad. If applicable (whether you studied abroad or not), please rank the following factors in order from most (5) to least (1) that prevented, almost prevented, or are still preventing your participation in a study abroad program:**

- Finances (Study Abroad Is/Was Too Expensive) \_\_\_\_\_
- Fit (NCSU Does Not Offer Any Programs That Fit Your Interests) \_\_\_\_\_
- Advisor/Faculty (Your Advisor/Faculty Discouraged You from Studying Abroad) \_\_\_\_\_
- Family/Friends (Your Family/Friends Discouraged You from Studying Abroad) \_\_\_\_\_
- Fear (You Were Nervous or Scared to Travel Abroad) \_\_\_\_\_

**If applicable, please list any other factors that are not included in the above list that prevented, almost prevented, or are still preventing your participation in a study abroad program:**

---



---



---

*This survey will be formatted in and distributed through either StudioAbroad or SurveyMonkey.*

## Appendix E

### Survey: Impact of Study Abroad on Participant Careers

This survey is anonymous. If you have questions about it, please contact the Curriculum Integration Program Coordinator, [saoprogrscicc@ncsu.edu](mailto:saoprogrscicc@ncsu.edu).

**Please complete the following information:**

1. North Carolina State University Major or Graduate Degree:
2. Year of Graduation:
3. Where did you study abroad during your time at North Carolina State University:
4. When did you study abroad during your time at North Carolina State University:
5. How long was your study abroad program (i.e. two weeks, academic semester, academic year, etc.):

**Please read the following statements and determine whether you strongly disagree, disagree, agree, strongly agree, or check not applicable:**

STATEMENT	STRONGLY DISAGREE	DISAGREE	NOT APPLICABLE	AGREE	STRONGLY AGREE
My study abroad experience influenced my career path.					
I was asked about my study abroad experience when I was interviewing for jobs.					
I work(ed) on an international team in my job.					
I travel(ed) for my job.					
I use(d) second language skills in my job.					
My study abroad coursework relates to the work I perform in my career.					
Study abroad provided me with the skills I need to adapt quickly to unfamiliar work environments					
Study abroad provided me with the skills I need to identify problems and resources for solutions					
Study abroad provided me with the skills to be open-minded and tolerant of different perspectives.					
Study abroad provided me with the skills to be flexible in adverse conditions					



**If applicable, please describe any other facets of your study abroad experiences, which are not included in the above list, which impacted or are impacting your career:**

---

---

---

*This survey will be formatted in and distributed through either StudioAbroad or SurveyMonkey.*

## Appendix F

### Initial CI Academic Department and College Questionnaire

1. Why is it important for your students to study abroad?
2. What do you want the goals/outcome of your students' study abroad experiences to be?
3. How do you want to integrate your students' experiences into your academic department and/or college?
4. Which courses do you recommend that your students can/should take abroad?
5. Are there courses that all of your students are required to take? If so, which courses and would these be good courses for your students to take abroad?
6. Which courses, if any, do recommend that your students take only NCSU?
7. Are there any countries or regions of the world that are leading research in your field?
8. What characteristics are you looking for in your study abroad partners (think about non-English speaking languages, major classes, general electives, internship component, etc.)?
9. Are you willing to create four-year semester-displays/curricula that integrate study abroad for one semester? If applicable, are you willing to do this for all of the concentrations in your college?

Appendix G

NC STATE UNIVERSITY

# Industrial Systems Engineering Study Abroad

College of Engineering

- Brazil**
- China**
- Japan**
- Spain**
- Turkey**
- United Kingdom**

### Why should Industrial Systems Engineering majors Study Abroad?

*"Gaining international experience is important for ISE students, because many will find themselves working in global environments... [ISE students] need to develop a sense of global competency, international business acumen, and cultural awareness to be successful. I was able to work for a global company...upon graduation...These experiences [traveling] gave me an appreciation for the complexities, challenges, and opportunities of developing products on a worldwide scale. There is nothing like first-hand experience in a global environment to build the skills and the confidence necessary to work in a global workplace! [Today] ISE [students] can go abroad and stay on track [toward graduation]...that is truly exciting.*

Dr. Anita Vila-Parrish,  
ISE Director of Undergraduate Programs

*"Studying in Hong Kong was a great way to learn from professors who have been in and around the industries that drive production around the globe. Hearing from their experiences and traveling around the areas in which this production happens was not only eye opening, but also very beneficial once I started my full-time job search."*

Jordan Mitchell, NCSU Industrial Systems Engineering Major,  
Hong Kong Polytechnic University, Spring 2011

### Studying abroad allows you to:

- Distinguish yourself and your resume by highlighting global experience.
- Earn an International Certificate in Engineering on your NCSU transcript.
- Immerse yourself in a new culture and gain exposure to diverse viewpoints.
- Enhance problem solving techniques and develop cross-cultural competence.
- Take GEP, major, and minor courses toward your Engineering degree.
- Graduate on time!



**STUDY ABROAD**  
choose your destination

**Find us at:**  
315 First Year College Commons  
919.515.2087  
Email: [study\\_abroad@ncsu.edu](mailto:study_abroad@ncsu.edu)  
<http://studyabroad.ncsu.edu>

## Study Abroad Programs for Industrial Systems Engineering Students

All featured semester and short-term program classes are taught in English unless otherwise mentioned. Items in gray are hyperlinked.

### Featured Semester Programs

#### **BRAZIL**

##### **FIPSE Engineering Program**

Students study at one of three Brazilian universities to take a number of ISE classes for credit. All classes are taught in Portuguese. FLP 101 or equivalent is a program requirement. Check out the course catalogue and equivalencies.

#### **CHINA**

##### **Hong Kong Polytechnic University**



*"My closest friends while abroad were from Amsterdam, China, France, and Germany. I met a lot of people who were completely different from me and we bonded over our experiences [together]."*

Jordan Mitchell, NCSU Industrial Systems Engineering Major,  
Hong Kong Polytechnic University, Spring 2011

Located in the heart of Hong Kong, HKPU has a long tradition of welcoming international students from to its campus. NCSU ISE students attend HKPU either during their junior year or during fall semester of their senior year. Students choose from over nine ISE courses to take at HKPU. HKPU also offers a number of GEP courses. Check out the course catalogue.

#### **TURKEY**

##### **Bogazici University**

BU, located in the vibrant city of Istanbul, is known for housing one of the best ISE programs in the world. NCSU ISE students attend BU for a semester during their junior or senior years. Students take a number of ISE and GEP courses for credit at BU. Check out the course catalogue.

*"I had a lot of opportunities to interact with the Turkish students [while study at BU]...it was awesome to frequently have the opportunity to have good conversations with local students...I went knowing approximately two words of Turkish; I was able to pick up enough of the language to get around."*

Emily Tucker, NCSU Industrial Systems Engineering Major,  
Bogazici University, Spring 2011

#### **UNITED KINGDOM**

##### **Swansea University**

The beach-front setting of SU makes it a desirable place to live. ISE students attend SU in the spring semester of their sophomore, junior, or senior years. Students take several ISE and GEP classes at for credit at SU as well as fulfill their engineering science elective. Check out the course catalogue.

**While these are featured programs for the College of Engineering, students are not limited to these opportunities. Please visit the Study Abroad Office website, <http://studyabroad.ncsu.edu>, for a list of all available programs.**

### Featured Short-Term Programs\*

\* NCSU offers over 30 summer and spring break programs, which are highlighted on the Study Abroad Office website.

#### **CHINA**

##### **NCSU Summer Program: Hangzhou International Relations, History, and Mechanical Engineering**

Students live on the Zhejiang University campus in Hangzhou and take classes for NCSU credit. Events with local Chinese students immerse participants in Chinese daily life.

#### **JAPAN**

##### **Nagoya University Summer Intensive Program: Latest Advanced Technology and Tasks in Automobile Engineering**

Students earn credit while connecting with the latest automobile technology in Japan. Exposure to automobile factories and research centers enhances students' know-how. Japanese language classes are an optional program component.

#### **SPAIN**

##### **NCSU Summer Program: Segovia**

Classes, excursions to aqueduct and textile factories, and homestays allow students to experience Spain while earning FLS credits. FLS 201 or equivalent is a program requirement.

#### **UNITED KINGDOM**

##### **NCSU Summer Program: London—ENG 331**

Students study industrial and technical organization communications, earning credit for ENG 331. London serves as the classroom, offering engineering-related site visits and historical excursions. This program will be offered in 2013.

Laura Testini, NCSU Industrial Systems Engineering Major,  
NCSU Summer Program: London-ENG 331, Summer 2011



### Frequently Asked Questions

#### **Can I afford it?**

Yes! On many semester programs students pay NCSU tuition and fees. Most federal aid and scholarships can be used abroad. The Study Abroad Office and College of Engineering award over \$150,000 in study abroad scholarships annually.

#### **How do I get started?**

Visit the Study Abroad Office website to learn more about your program options. Contact your ISE Academic Advisor, Dr. Anita Vila-Parrish ([arvila@ncsu.edu](mailto:arvila@ncsu.edu)) and attend a Study Abroad Office general advising session.

## Appendix H

### COLLEGE OF ENGINEERING: Industrial and Systems Engineering

#### Initial Exchange Matches

February 2009

#### ASIA

##### **Hong Kong Polytechnic University (Hong Kong)**

- Language of Instruction: English
- Course Catalogue
- Expanded Academic Overview

##### **Seoul National University (South Korea)**

- Language of Instruction: Korean and Some English (prior study of Korean strongly encouraged)
- Course Catalogue
- Expanded Academic Overview

#### EUROPE

##### **Bogazici University (Turkey)**

- Language of Instruction: English
- Course Catalogue
- Expanded Academic Overview

##### **Lund University (Sweden)**

- Language of Instruction: English and Swedish
- Course Catalogue
- Expanded Academic Overview

##### **Swansea University (United Kingdom)**

- Language of Instruction: English
- Course Catalogue
- Expanded Academic Overview

##### **Universidad Politecnica de Valencia: (Spain)**

- Language of Instruction: Spanish
- Course Catalogue
- Expanded Academic Overview

#### SOUTH AMERICA

##### **FIPSE Engineering Program (Brazil)**

- Language of Instruction: Portuguese
- Course Catalogue
- Expanded Academic Overview



## Appendix I

## Expanded Academic Overview Example: Lund University

LUND UNIVERSITY – Lund, Sweden

Program Type: NCSE exchange, UNCEP, direct enroll, TASSEP

Good Match for Classes: Humanities/Social Sciences, PAMS, Engineering, Music, Law, Medicine, some Economics/Business

Website: <http://www.lu.se/lund-university/>

Course website: <http://www.lu.se/lund-university/find-a-course>

Study Abroad website: <http://www.lu.se/english/education/exchangestudies/>

#### FACULTIES offered at Lund University

- Faculty of Engineering
- Faculty of Science
- Faculty of Medicine
- Faculty of Law
- Faculty of Social Sciences
- Schools of Economics and Management
- Faculty of Humanities and Theology
- The Performing Arts (The Malmö Academy of Music)

#### COURSE offerings at Lund University:

- COLLEGE: Faculty of Engineering
  - MAJOR/COURSES: Over 400 courses in Engineering offered in the areas of Architecture and Built Environment, Automatic Control, Building Environmental Technology, Centre for Mathematical Sciences, Chemical Engineering, Chemistry, Computer Science, Construction Sciences, Design Sciences, Electrical Information Technology, Energy Sciences, Food Technology Engineering Nutrition, Immune Technology, Industrial Electrical Engineering Automation, Industrial Management Logistics, Mechanical Engineering, Physics, Technology Society, Environmental and Energy System Studies, and outside courses [http://www.lu.se/english/education/exchangestudies/courses/all\\_courses/](http://www.lu.se/english/education/exchangestudies/courses/all_courses/)
- COLLEGE: Faculty of Science
  - Astronomy and Theoretical Physics
    - COURSES:
      - Introduction to Astrophysics
  - Biology
  - Chemistry
    - COURSES in English: (Bachelor level)
      - Chemistry: Biochemical Methods
      - Chemistry: Molecular Interactions and Structure
      - Chemistry: Pharmaceutical Science (Master level)
      - Chemistry: Analytical Chemistry - Advanced Course

1

- Mathematical Statistics: Non-linear Time Series Analysis
- Mathematical Statistics: Statistical Image Analysis
- Mathematical Statistics: Statistical Modelling of Extreme Values
- Mathematical Statistics: Survival Analysis
- Mathematical Statistics: Time Series Analysis

#### • Physics

- COURSES in English suitable for exchange students: (Bachelor level)
  - Physics 3: Modern Physics
  - Physics: Atomic and Molecular Physics
  - Physics: Bachelor's Degree Project
  - Physics: Fundamental Combustion
  - Physics: Introduction to Quantum Mechanics
  - Physics: Nuclear Physics
  - Physics: Processing and Device Technology
  - Physics: Quantum Mechanics and Computations
- (Master level)
  - Physics 4: Introduction to Advanced Physics
  - Experimental Biophysics
  - Physics Experiments in Research and Society
  - Physics: Advanced Optics and Lasers
  - Physics: Advanced Processing of Nanostructures
  - Physics: Applied Subatomic Physics
  - Physics: Atomic and Molecular Spectroscopy
  - Physics: Chaos for Science and Technology
  - Physics: Crystal Growth and Semiconductor Epitaxy
  - Physics: Complex Economy
  - Physics: Electromagnetism
  - Physics: Electron Transport in Nanostructures
  - Physics: Environmental Monitoring
  - Physics: Experimental Tools
  - Physics: High Speed Devices
  - Physics: Laser-based Combustion Diagnostics
  - Physics: Lasers
  - Physics: Light-Matter Interaction
  - Physics: Medical Optics
  - Physics: Modern Experimental Particle Physics
  - Physics: Modern Subatomic Physics
  - Physics: Molecular Physics
  - Physics: Multi-spectral Imaging
  - Physics: Nanoelectronics
  - Physics: Nanomaterials - thermodynamics and kinetics
  - Physics: Photonics and Optical Communication
  - Physics: Physics and Chemistry of Surfaces
  - Physics: Quantum Mechanics
  - Physics: Scanning Probe Microscopy

3

- Chemistry: Bioanalytical Chemistry
- Chemistry: Biochemistry - Advanced Course
- Chemistry: Bioinorganic Chemistry
- Chemistry: Chemist's Modelling Tools
- Chemistry: Coordination Chemistry
- Chemistry: Electroanalytical Chemistry
- Chemistry: Magnetic Resonance - Spectroscopy and Imaging
- Chemistry: Medicinal Chemistry
- Chemistry: Molecular Quantum Mechanics
- Chemistry: Optical Methods in Molecular Spectroscopy
- Chemistry: Organic Chemistry - Advanced Course
- Chemistry: Organometallic Chemistry
- Chemistry: Principles of Mass Spectrometric Protein Characterization
- Chemistry: Scattering Methods
- Chemistry: Statistical Thermodynamics
- Chemistry: Structural Bioinformatics
- Chemistry: Surface and Colloid Chemistry - Advanced Course
- Chemistry: Unifying Concepts in Nanoscience - Size Effects and Self-assembly
- Essential Skills for Young Scientists
- Radiation Physics
- Centre for Mathematical Sciences
  - COURSES in English: (Bachelor level)
    - Mathematics: Analytic Functions
    - Mathematics: Master's Degree Project (Master level courses)
    - Mathematics: Algebraic Structures
    - Mathematics: Differential Geometry
    - Mathematics: Functions of Complex Variables
    - Mathematics: Integration Theory
    - Mathematics: Linear Functional Analysis
    - Mathematics: Number Theory
    - Mathematics: Ordinary Differential Equations
    - Mathematics: Specialised Course in Integration Theory
    - Mathematics: Specialised Course in Linear Functional Analysis
    - Mathematics: Topology
- Mathematical Statistics
  - COURSES in English: (Bachelor level)
    - Mathematical Statistics: Stationary Stochastic Processes (Master level)
    - Mathematical Statistics: Financial Statistics
    - Mathematical Statistics: Linear and Logistic Regression
    - Mathematical Statistics: Mathematical Foundations of Probability
    - Mathematical Statistics: Monte Carlo Methods for Statistical Inference

2

- Physics: Semiconductor Physics
- Physics: Solid State Theory
- Physics: Theoretical Nuclear Physics
- Physics: Spectroscopy and the Quantum Description of Matter
- The Physics of Low-dimensions

#### • Earth and Ecosystem Sciences

- Division of Geology
  - (Master level)
    - Evolution of the Biosphere, Palaeoecology and Palaeontology
    - Evolution of the Lithosphere, Tectonics and Planetary Geology
    - Geology: Master Degree Project
    - Geology: Research Methodology, Scientific Communication and Geostatistics
    - Metamorphic Petrology and Structural Geology
    - Quaternary Geology: Glacial Sedimentology - Processes, Sediments and Landform Systems
    - Quaternary Geology: Palaeoecological Methods and Environmental Analysis
    - Quaternary Geology: Quaternary Climate and Glaciation History
    - Sedimentary Basins, Palaeoclimatology and Stratigraphy
- Division of Physical Geography & Ecosystems
  - (Master level)
    - Physical Geography: Climate Change and its Impacts on the Environment
    - Physical Geography: Global Ecosystem Dynamics
    - Physical Geography: Greenhouse Gases and the Carbon Cycle

- COLLEGE: Faculty of Medicine: <http://www.med.lu.se/english>

#### ○ MAJOR:

- COURSES:
  - Obstetrics and Gynecology
  - Surgery
  - Biomedicine

- COLLEGE: Faculty of Law

#### ○ MAJOR: Law

- COURSES:
  - JUFN04: Introduction to Swedish Law
  - JUDN03: EC Tax Law
  - JUFN03: Enforcement of European Community Law
  - JRHN11: Comparative European Legal History
  - JUDN04: European Indirect Taxation
  - JUFN02: Scandinavian Legal Thinking
  - JUFN04: EC Competition and Procedure Law
  - JUFN05: Commercial Law in the Information Society
  - JUFN03: Legal History of Minorities

4

- **COLLEGE:** Faculty of Social Sciences
  - **MAJOR:** Gender Studies
    - **COURSES:**
      - Gender in Science and Technology
      - Gender Studies: Scandinavian Model of Equality – Gender, Class, Ethnicity, and Social Welfare
      - Gender, Social Change, and Modernity in Sweden/Scandinavia
  - **MAJOR:** Human Geography
    - **COURSES:**
      - Population, Settlement, and Economic Geography
  - **MAJOR:** Peace and Conflict Studies
    - **COURSES:**
      - Diplomacy, Negotiation, and Mediation
  - **MAJOR:** ---
    - **COURSES:**
      - SASA05: Population Settlement and Eco. Geography
      - SASA06: Swedish Social Policy
      - SASA07: Education, Culture, and Communication
      - SASA08: Gender Social Change and Modernity in Sweden
      - SASA09: Scandinavian Models of Equality
  - **MAJOR:** Political Science
    - **COURSES:**
      - STVC31 / STVK01 - The West and the Rest in International Relations Theory
      - STVC21 / STVK01 - The United States of Europe?
      - STVC22 / STVK01 – Democratization
      - STVC24 / STVK01 - The Politics of the Environment and Sustainable Development
      - STVC11 - Swedish Politics
  - **MAJOR:** Sociology
    - **COURSES:**
      - Managing Sustainability, Society and Collective Behavior
      - The Sociology of Human Development
      - Swedish Social Policy
- **COLLEGE:** Schools of Economics & Management
  - **MAJOR:** ---
    - **COURSES:**
      - SASA03: Swedish Economic Development
      - SASE05: Economic Change, Labor Market and the Population
- **COLLEGE:** Faculty of Humanities and Theology
  - **MAJOR:** Swedish and Scandinavian Area Studies (SAS)
    - **COURSES:**
      - SASH01: Swedish History in a Nordic Perspective
      - SASH02: Viking Age Scandinavia

5

- SASH03: Swedish Film
- SASH04: Swedish Society
- SASH13: Intro to Scandinavian Culture and Society
- SASH14: Modern Design in Scandinavia
- SASH15: Swedish Music History
- SASH16: Survey of Swedish Literature
- SASH17: Swedish Politics – Past and Present
- SASH18: Life and Death of Medieval People in N. Europe
- **MAJOR:** European Dimension
  - **COURSES:**
    - SASH05: The Dawn of European Culture
    - SASH06: Becoming European, Contemp. Perspectives
    - SASH07: Becoming European, Historical Perspectives
    - SASH08: Ancient Greece: from Knossos to Athens
    - SASH09: Ancient Egypt and its Influence in Early European Civilization
    - SASH19: The Dynamics of Interaction: Celt, Etruscans, Greeks and Romans
    - SASH20: History of the Holocaust
    - SASH25: L'Union Europeenne (offered in French only)
    - OCKK11: Political Mythologies in Eastern Europe
- **OTHER REGIONAL STUDIES**
  - **COURSES:**
    - SASH12: Introduction to Contemporary Latin America
    - SASH23: Introduction to the Middle East
- **MAJOR:** Global Issues of Contemporary Issues
  - **COURSES:**
    - SASH10: The Role of Religion in the Middle East Conflict
    - SASH11: Human Rights – a Multidisciplinary Intro
    - SASH21: Terror in the Name of God – Psychological Perspectives on Terrorism
    - SASH22: Global Environmental Justice
    - SASH24: Violence, Gender and Culture – A Global Survey
    - SASH26: Diversity of the World's Languages
    - ILHB25: Las Humanidades en la Era Global (Spanish only)
- **COLLEGE:** The Performing Arts (The Malmo Academy of Music)
  - **DEPARTMENT:** Academy of Music
    - **MAJOR:** Music
      - **Special note:** Courses in Interpretation & Music Education for Foreign students are for students outside the Scandinavian countries. They are one-year courses, where the students study on the same terms as regular students that follow a full programme.
        - **COURSES:**
          - MUHA01: Advanced Course in Interpretation for Foreign Students
          - MUHA02: Advanced Course in Interpretation for Foreign Students
          - MUHA03: Advanced Course in Composition for Foreign Students
          - MUHB61: Course in Music Education for Foreign Students

6

- MUH333: Course in Music Education for Foreign Students
- **COLLEGE:** Faculty of Theology
  - **DEPARTMENTS:** Theology and Religious Studies
    - **MAJOR(s):** Religious studies, Jewish studies, Islamology, History of Religions, Human Rights
      - **COURSES:** (offered Spring of '08)
        - SAS H21 Terror in the Name of God – Psychological Perspectives on Terrorism;
        - TEO B05 Children of Abraham,
- **Swedish Language Courses for Exchange Students:**
  - SVE E01 Swedish for Exchange Students, Level 1 (from basic)
  - SVE E02 Swedish for Exchange Students, Level 2
  - SVE E03 Swedish for Exchange Students, Level 3
  - SVE E04 Swedish for Exchange Students, Level 4
  - SVE E05 Swedish for Exchange Students, Level 5
  - SVE E06 Swedish for Exchange Students, Level 6
  - SVE E07 Swedish for Exchange Students, Level 7
  - SVE E08 Swedish for Exchange Students, Level 8
- **Additional Information:**
  - **Student Population:** 28,000 full time equivalent students; 2,000 exchange students per year.
  - **Activities:** Today, all students, including exchange students, are required to join the student union and one of the nations (social and academic center for students from the different regions) after arrival in Lund
  - **Academics:** The academic calendar runs from late August to late December and from late January to early June. Exchange students are encouraged to enroll in a two-week Swedish language, culture, and orientation program before the semester begins. Lund University offers more than 400 courses in English annually. Course loads vary but students generally take between three and five courses per semester.
  - **Accommodations:** The International Housing Office (IHO) facilitates accommodation for exchange students and will do their utmost to help you, but is unable to guarantee that you will get a room. Those students who are unable to receive housing through IHO can work with an accommodation agency to secure housing.
  - **Location:** The main Lund University campus is located in the City of Lund, which is 15 minutes by train from Malmö (the third largest city in Sweden) and less than an hour from Copenhagen (Scandinavia's largest city and the capital of Denmark). Voted the best place to live in Sweden, Lund is a safe city with the healthiest, richest and youngest population in the country. The students at Lund University comprise a large part of the population of the city and consequently have a significant impact on it and contribute to the youthful, laid-back atmosphere.
  - **Rankings:**
    - Top 100 University: 89th place in the [Times Higher Education World University Rankings 2010](#)
    - Top 100 University: 72nd place in the [QS Ranking 2010](#)

7



Appendix J




NC STATE UNIVERSITY

# Industrial Systems Engineering Study Abroad

## College of Engineering—Course Equivalencies

<p><b>Brazil</b></p> <p><b>China</b></p> <p><b>Turkey</b></p> <p><b>United Kingdom</b></p>	<h3>Why should Industrial Systems Engineering majors Study Abroad?</h3> <p>Students who study abroad are immersed in new cultures and gain exposure to diverse viewpoints while expanding their academic and personal horizons. Living and traveling abroad encourages students to improve their cross-cultural competence, strengthen their intercultural communication skills, and enhance their problem solving techniques.</p> <p><i>"Gaining international experience is important for ISE students, because many will find themselves working in global environments... [ISE students] need to develop a sense of global competency, international business acumen, and cultural awareness to be successful... There is nothing like first-hand experience in a global environment to build the skills and the confidence necessary to work in a global workplace!"</i></p> <p style="text-align: right;">Dr. Anita Vila-Parrish, ISE Director of Undergraduate Programs</p> <p>With adequate planning and your support, students can study abroad and graduate on time!</p> <h3>What steps is the NCSU Study Abroad Office taking to make study abroad more accessible to ISE students?</h3> <p>The NCSU Study Abroad Office collaborates with ISE administrators and faculty through its curriculum integration initiative in order to increase student access to degree-relevant study abroad experiences. Together we work to define "best fit" program options for ISE students, considering the curricula, internship opportunities, and language of instruction of each program.</p> <p>This brochure lists course equivalencies for the "best fit" semester and year-long study abroad programs for ISE students.</p>
--	---

# STUDY ABROAD

choose your destination

**Find us at:**  
 315 First Year College Commons  
 919.515.2087  
 Email: [study\\_abroad@ncsu.edu](mailto:study_abroad@ncsu.edu)  
<http://studyabroad.ncsu.edu>



## Study Abroad Course Equivalencies for Industrial Systems Engineering Students

### Featured Semester and Year-Long Programs\*

\* All featured program classes are taught in English unless otherwise mentioned.

#### BRAZIL

##### FIPSE Engineering Program

Students study at one of three Brazilian universities and take a number of ISE classes for credit at these intuitions. All classes are taught in Portuguese. FLP 101 or equivalent is a program requirement. Check out the course catalogue and course equivalencies.

#### CHINA

##### Hong Kong Polytechnic University

<u>NCSU Course Number</u>	<u>HKPU Course Equivalency</u>
ISE 216	ISE 202
ISE 316	ISE 244 or ISE 402
ISE 311	ISE 431
ISE 361	ISE 206
ISE 408	ISE 319
ISE 416	ISE 412
ISE 443	ISE 369
ISE 453	ISE 448

Located in the heart of Hong Kong, HKPU has a long tradition of welcoming international students from overseas to its campus. Currently, the University houses 1,000 international students from over 40 countries. NCSU ISE students attend HKPU either during their junior year or during fall semester of their senior year. Students also take GEP courses at HPKU. Check out the course catalogue.



*"My decision to go to Hong Kong...allowed me to travel all over southeast Asia. My closest friends while abroad were from Amsterdam, China, France, and Germany. I met a lot of people who were completely different from me and we bonded over our experiences [together]."*

Jordan Mitchell, NCSU Industrial Systems Engineering Major,  
Hong Kong Polytechnic University, Spring 2011

#### TURKEY

##### Bogazici University

<u>NCSU Course Number</u>	<u>HKPU Course Equivalency</u>
ISE 216	IE 220
ISE 311	IE 341
ISE 361	IE 202
ISE 401	IE 305
ISE 408	IE 413
ISE 443	IE 423
ISE 452	IE 430
ST 372	IE 225

BU, located in the historic and vibrant city of Istanbul, is known for housing one of the best ISE programs in the world. BU is a "green" university that values diversity among its students and faculty. NCSU ISE students attend BU for a semester during their junior or senior years. Along with ISE classes, students also take GEP courses for credit at BU. Check out the course catalogue.

*"I had a lot of opportunities to interact with the Turkish students [while study at BU]...it was awesome to frequently have the opportunity to have good conversations with the local students...While I went knowing approximately two words of Turkish, I was able to pick up enough of the language to get around."*

Emily Tucker, NCSU Industrial Systems Engineering Major,  
Bogazici University, Spring 2011

#### UNITED KINGDOM

<u>NCSU Course Number</u>	<u>HKPU Course Equivalency</u>
ISE 443	EG 285
ISE 216	EG 182
ISE 316	EG 284
ISE 361	EG 365
Engineering Science Elective	EG 161

##### Swansea University

Swansea's beach-front setting makes the University a desirable place to live. ISE students attend Swansea for an academic year or in the spring semester of their sophomore, junior, or senior years. It is recommended that students take no more than two ISE classes per semester at Swansea. Students have the option to take GEP classes at for credit at Swansea and students may also fulfill their engineering science elective at Swansea by taking EG 161. Check out the course catalogue.

**While these are featured programs for the College of Engineering, students are not limited to these opportunities. Please visit the Study Abroad Office website, <http://studyabroad.ncsu.edu>, for a list of all available programs.**

Appendix K

STUDY ABROAD  
choose your destination

Study Abroad Organizational Chart – Fall 2011

