Bachelor of Integrated Studies

Sustainability, Society & Resource Management

Undergraduate Degree Program

2018-2019
Welcome!

The College of Arts and Sciences hosts the Integrated Studies Program and grants the Bachelor of Integrated Studies Degree. As Associate Dean of the College of Arts and Sciences, it is my privilege to direct this program. The Bachelor of Integrated Studies degree provides a means for the creation of interdisciplinary programs. The degrees are aimed at providing an education that is a basis for life-long learning while equipping students to work in areas that are underserved by established disciplines. Under the umbrella of Integrated Studies there are a number of emphases which serve as integrated majors for our students. Among this is Sustainability, Society, and Resource Management (SSRM).

The SSRM emphasis of the Bachelor of Integrated Studies is a magnificent exemplar of the ideal of blending expertise in a particular area with a broad grasp of many in order to prepare our students for the needs of a changing world. Students in this program will have the benefit of learning from experts in the areas of biology, communication, and geography. These diverse strands integrated into a single degree which will prepare the student to understand and communicate with businesses and the public about impact on the environment.

This program is very exciting. It has drawn interest from people who are interested in the environment both from the point of view of private citizens and the point of view of business. We in the College of Arts and Sciences are proud to be hosting it.

B Winters

Dr. Bobby Winters, Associate Dean
College of Arts and Sciences
Program Description

Increasingly, the social, political and economic pressures on our resource base has created a climate of concern that depletion or damage may occur (if it has not already) unless a strategy of sustainability is implemented. Within individual disciplines, sustainability efforts take on a narrow focus that reflects the expertise imparted by that area of work. Ecologists tend to work on natural populations and ignore social or economic issues. Social scientists focus on the human element, but seldom have an understanding of natural systems. Scientists in both of these areas frequently struggle with the challenges of communicating with those outside their discipline, especially the lay community.

The Sustainability, Society and Resource Management (SSRM) program in the Bachelor of Integrated Studies (BIS) degree is designed to offer students an opportunity to develop interdisciplinary skills in biology, communication, geography and social sciences that are required for effective resource management in today’s complex world. Those completing the emphasis will be equipped to work in a variety of agencies, organizations and industries that impact or have responsibility for protection and management of resources.

Pittsburg State University’s Bachelors of Integrated Studies (BIS) degree in Sustainability, Society & Resource Management (SSRM) is the only program of its kind in the State of Kansas. Our students learn through a variety of approaches, including classroom instruction, field exercises, and hands-on laboratory experiences. Additional opportunities for internships and independent research under the guidance of a faculty mentor are available. The BIS-SSRM program is supported by the GIS Laboratory in the Geography Department and the CRL Laboratory in the Communication Department.

The BIS SSRM degree is designed to provide interdisciplinary experience and credentials for individuals that want to build on their basic disciplinary expertise. A total of 154 hours is required. The primary focus of this curriculum is to provide an opportunity for students to pursue an interdisciplinary program that will prepare them to participate in programs dealing with resource management within the framework of sustainability.
The SSRM emphasis was proposed and submitted for University review in the fall of 2010, was approved by the Regents in the spring of 2011 and first offered in the fall of 2011.

Pittsburg State University is the only Regents institution in Kansas with an interdisciplinary degree program in Sustainability, Society and Resource Management.

By the spring of 2013, there were 24 listed as SSRM majors on GUS.

The program also has an anonymous donor that annually provides 5 scholarships at $1,000 each and 3 Sustainability Internships at $2,000 plus paid summer tuition for each intern.

In the spring of 2013, out of our 20 majors, 25% were on the Dean's Honor Roll. Four of those were double majors.
2018-2019 SSRM Faculty Contributors

Christopher Anderson, Ph.D.
Associate Professor of English

Dr. Anderson teaches courses in American literature, creative writing, and popular culture. As a scholar in American literature, Anderson’s interests include American environmental writing, ecopoetry, science and technology in literature and film; and the depiction of ugliness, decay, waste places, and garbage in literature and culture. His academic articles include “Sacred Waste: Ecology, Spirit, and the American Garbage Poem” (ISLE: Interdisciplinary Studies in Literature and Environment) and “Post-Apocalyptic Nostalgia: WALL-E, Garbage, and American Ambivalence toward Manufactured Goods” (LIT: Literature, Interpretation, Theory). His poetry has appeared in journals such as Tar River Poetry, River Styx, Ellipsis, Chicago Quarterly Review, Tipton Poetry Journal, and The Midwest Quarterly.

Christine Brodsky, Ph.D.
Assistant Professor of Biology

Dr. Brodsky joined the PSU Department of Biology in the Fall of 2016 and teaches the Environmental Life Science course. Her research focuses on small urban greenspaces as a habitat resource for urban wildlife, particularly vacant lots as habitat for the bird community. Additionally, she has studied the human perception and environmental justice of greenspace management in cities. Most of her research has occurred in Baltimore, Maryland with the Baltimore Ecosystem Study. Past research has also included work on animal communication, distribution of birds across urban landscapes, and soil chemistry impacts on bird territory placement.

Catherine Hooey, Ph.D.
Professor of Geography / Geography Program Coordinator

My research focuses on human-environment interaction. I am particularly interested in marginal environments and how people perceive and adapt to variable conditions. Recent research includes southeast Kansas and mining landscapes, and west-central Alberta and agriculture. Past research has included perception of change in small towns and geographic education.
Alicia Mason, Ph.D.
Associate Professor of Communication

Dr. Alicia Mason joined the PSU Department of Communication in Fall of 2009. She is a former broadcaster, who worked with local media outlets KOAM and KKOW in SE Kansas, prior to receiving a Ph.D. from the University of Oklahoma. Dr. Mason's work has been presented at several national and international conferences, and appears in top academic journals including: Communication Quarterly, Communication Monographs, Innovative Abstracts, Health Communication, Journal of Intercultural Communication, and the International Journal of Communication and Health. Mason’s academic interest in risk/crisis communication spans organizational/business, public health, and environmental contexts.

Joey Pogue, Ph.D.
Associate Professor of Communication

Joey Pogue joined the Department of Communication in the fall of 2004. Besides acting as the Director of Graduate Studies, he teaches media theory, interpersonal communication and gender studies to both undergraduate and graduate students. Gender Communication is his favorite area of study. Occasionally, he directs a theatre production. Joey’s current research agenda focuses on gender construction and, particularly, mediated masculinity. He is an active member of The Organization for the Study of Communication Language and Gender and he also participates in the National Communication Association. He enjoys outdoor sports, especially those associated with nature. He attends plays, visit museums, and he enjoys the investigation of historical phenomena.

Kristin Livingston, M.A.
Instructor, Department of Communication

Ms. Kris Livingston is a communication instructor for Pittsburg State University teaching advertising. She served as an Assistant Professor of Communication from 2009 to 2015 in the Department of Communication for Missouri Southern State University. She has worked at Pittsburg State University as the Assistant Director of Student Diversity advising and supporting ethnic minority groups. In fall of 2016, she will be a student in the Ed.D program at Baker University as a student in higher education with a concentration in Instructional Design and Performance Technology. She has presented at the National Communication Association and for the Organization for the Study of Communication, Language, and Gender conferences. Her most recent presentation was "Gender Effects on Pet Loss and Social Media Narratives." She specializes in gender communication, diversity in…

James R. Triplett, Ph.D.
Emeritus Professor of Biology

After his Ph.D. he joined the faculty in the Department of Fisheries and Wildlife at Ohio State University, but left in 1981 for a position in the Biology Department at PSU where he served as Chair from 1985 until 2008. He was elected Chair of the Grand/Neosho River Committee in 1990, and appointed Chair of the Special Commission on Surface Water Quality in 1978 by Governor Bill Graves. In 2000, he was presented the FOX Award by the Kansas Water Office for work with Kansas Water Resources issues, and appointed to the VISION: 21st Century Task Force. He currently works in the area of natural resource policy and management with an emphasis on sustainability. He serves as President of the Grand Lake O’ the Cherokees Watershed Alliance Foundation and Chair of the Neosho Basin Advisory Committee.
# BIS: SSRM Degree Program Requirements

Minimum Degree Requirements 124 hours

<table>
<thead>
<tr>
<th>General Education Requirements for All Baccalaureate Degrees</th>
<th>47-50 hours</th>
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<tbody>
<tr>
<td><strong>REQUIRED COURSES</strong></td>
<td>(10 \text{ hrs})</td>
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<tr>
<td>SSRM 200</td>
<td>Introduction to Sustainability, Society &amp; Resource Mgmt</td>
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<tr>
<td>ECON 201</td>
<td>Introduction to Macroeconomics</td>
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<td>ENG 301</td>
<td>Technical &amp; Professional Writing</td>
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<tr>
<td>SSRM 600</td>
<td>Senior Seminar in Sustainability, Society and Resource Mgmt...</td>
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<tr>
<td><strong>BIOLOGY (Select 5 courses)</strong></td>
<td>15 hrs</td>
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<tr>
<td>BIOL 304</td>
<td>Soil Ecology</td>
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<tr>
<td>BIOL 313</td>
<td>Principles of Conservation</td>
</tr>
<tr>
<td>BIOL 330</td>
<td>Principles of Ecology</td>
</tr>
<tr>
<td>BIOL 537</td>
<td>Regional Natural History</td>
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<tr>
<td>BIOL 602</td>
<td>Topics in Biology</td>
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<tr>
<td>BIOL 612</td>
<td>Internship in Biology</td>
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<td>BIOL 615</td>
<td>Environmental Protection</td>
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<tr>
<td>BIOL 617</td>
<td>Environmental Health</td>
</tr>
<tr>
<td>BIOL 643</td>
<td>Natural History Interpretation</td>
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<tr>
<td><strong>COMMUNICATION (Select 5 courses)</strong></td>
<td>15 hrs</td>
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<tr>
<td>COMM 277</td>
<td>Introduction to Public Relations</td>
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<tr>
<td>COMM 450</td>
<td>Small Group Communication</td>
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<td>COMM 530</td>
<td>Interpersonal Communication</td>
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<td>COMM 601</td>
<td>Intercultural Communication</td>
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<td>COMM 690</td>
<td>Internship in Applied Communication</td>
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<tr>
<td>COMM 702</td>
<td>Mass Media Management</td>
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<td>COMM 726</td>
<td>Media Analysis &amp; Criticism</td>
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<td>COMM 755</td>
<td>Organizational Communication</td>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>COMM 785</td>
<td>International Communication</td>
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<td>COMM 795</td>
<td>Issues in Communication: Risk &amp; Crisis Communication</td>
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<td></td>
<td><strong>SOCIAL SCIENCE REQUIREMENTS (Select 5 courses)</strong></td>
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<td></td>
<td>Environmental Geography (Select 3)</td>
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<tr>
<td>GEOG 302</td>
<td>Introduction to Environmental Geography</td>
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<td>GEOG 303</td>
<td>Geographic Information Systems</td>
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<td>GEOG 401</td>
<td>Urban and Regional Planning</td>
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<td>GEOG 502</td>
<td>Global Environmental Change</td>
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<td>GEOG 602</td>
<td>Internship in GIS &amp; Environmental Geography</td>
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<td>Legal/Ethical (Select 2)</td>
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<td>PHIL 114</td>
<td>Environmental Ethics</td>
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<td>POLS 512</td>
<td>Environmental Politics</td>
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<td>POLS 609</td>
<td>Administrative Law</td>
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<td>SOC 676</td>
<td>Global Sociology</td>
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<td><strong>FREE ELECTIVES</strong></td>
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<td>TM 679</td>
<td>Presentation Skills</td>
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<tr>
<td>INT 690</td>
<td>Study Abroad</td>
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Students should select courses specific to their focus such as the ones listed below. Qualified electives include other BIO-COMM-HPSS courses not used for major requirements, or courses recommended in consultation with advisor.
New in Fall 2018!

The PSU Sustainability Certificate is a great fit if you're interested in combining academic excellence and real-world experience. By earning a Certificate in Sustainability Leadership students graduate with the knowledge and skills to become a sustainability leader in their professional career and community.

Because sustainability embraces many disciplines, methodologies, and practices, certificate students will gain insight into the dynamics of natural, technological and human systems, in addition to core issues of economics, equity, and culture.

The certificate is designed to enrich your current degree focus and help you stand out from the crowd following graduation. By providing significant exposure to sustainability-related concepts and practices, our students gain an understanding of how to integrate human-environmental systems-thinking within everyday reality. The curriculum is designed to help students critically analyze, problem solve, and engage in solution-focused practices.

To earn an undergraduate sustainability certificate students will complete 15-credit hours that align with their major or minor, or individual interest areas (e.g., operations management, leadership, environmental safety, urban ecology).

The certificate consists of five core units:
- Sustainability & Society
- Business & Economics
- Environmental Systems
- Ethics, Professional Development & Leadership
- Field Studies & Applications

Students will select one course from each unit (a total of 15 hours) and complete 20 hours of experiential learning to achieve the Sustainability Leadership Certificate. The experiential learning activities may include collaborative activities involving service learning, community outreach, or applied research with a campus department, community organization, or regional business involving a sustainability endeavor.

For more information about the undergraduate Sustainability Leadership Certificate contact Dr. Bobby Winters, Director of Interdisciplinary Studies programs at bwinters@pittstate.edu
Since there is no official department office who do I go to if I have any questions or concerns?
The SSRM program has a Program Coordinator. This individual is a full-time faculty member in one of the participating degree areas. The Program Coordinator position rotates annually. Questions about classes or coursework should be forwarded to your faculty advisor.

Who is my advisor and how do I enroll?
SSRM students are free to seek advisement from any faculty member involved in the program. It is important you are comfortable working with your advisor.

Do I have to complete an internship?
Internships are encouraged but not required for this degree program. Faculty will provide information and updates on available internships throughout the academic year. Be sure to check the PSU: Students for Sustainability Facebook Page and the SSRM Canvas Community page for details if you are interested.

What kind of jobs can I get with an SSRM degree?
Successful graduates will be qualified for employment in a broad range of private enterprise, government agencies and non-profit organizations in the various natural resources fields, and will be well-equipped for graduate studies. Examples of sustainability related positions include: city & local government, environmental impact analyst, environmental scientists, business operations specialists, conservation scientists, wildlife manager, urban planners, transportation, storage, and distribution managers, soil & plant scientists, community development analyst, industrial production managers, and land developers.

Sustainability professionals may help their employers conserve resources (from energy to water to dollars) and improve efficiency; create new, more environmentally and socially responsible technologies or services; educate stakeholders about environmental and social issues, and facilitate planning and programming accordingly. Regardless of job title, the work of all sustainability professionals focuses on the intersection of people, places, spaces and the environments in which they exist.

Where can I find more information about careers in sustainability?
For more information on potential careers and compensation we recommend reading Hamilton (2012) Is a Sustainability Career on Your Green Horizon? Hosted through the U.S. Bureau of Labor and Statistics (BLS).

**Are there any scholarships available to me?**

The SSRM program provides (5) $1,000 scholarships annually to our students. To qualify students must be an SSRM major, a full-time student who are at the sophomore level or above with a minimum GPA of 2.5. Selection for this scholarship is a two-step process. Applicants who meet the above criteria will then be asked to write an essay of no more than 500 words describing their motivation for seeking a degree in SSRM, their attitude toward environmental issues, their plans for the future, and any information on their financial needs that they would like to share with the committee. The essays will be reviewed by the selection committee. Award decisions will be based on a combination of academic merit and essay content. Recipients shall be selected by a committee consisting of the Donor and faculty representatives for the Sustainability, Society, and Resource Management program.

**What do I need to know to be successful in the SSRM degree program?**

Students who successfully complete in the SSRM degree program are environmentally conscious individuals who genuinely want to make a positive difference in the world around them. As a result our students are comfortable independently exploring their own unique environmental interests and are able to synthesize the materials and coursework from Geography, Communication and Biology into their interest areas.

**I have a research idea, how do I go about creating an independent topic or activity with a faculty member?**

Our SSRM program encourages undergraduate research engagement. Any SSRM faculty member is able to help advise an independent student-led research project. You will want to schedule a meeting with the faculty member you are interested in working with to discuss your ideas further. SSRM students have access to the resources and technology of the GIS Lab in Geography, and the Communication Research Lab.

**What if there is a course I want to take but is not listed on SSRM course list?**

In this case you have two options. The first would be to take the course as non-degree related meaning that you elect to take the course in addition to the courses required for the SSRM degree. The second option would be to request a course substitution through your faculty advisor. In order to request a course substitution you must provide a compelling argument as to how and why the chosen course is relevant and complimentary to your environmental interest areas. Please note that the introductory (SSRM200) and capstone course (SSRM600) cannot be substituted.
Student Involvement & Success

Our students frequently present their original research at a variety of local, national and international conferences such as: PSU Research Colloquium, International Symposium on Society and Resource Management, National Applied Geography Conference, Las Vegas National Technology & Social Science Conference, and the National Social Science Association.

Outreach Efforts with Community Groups

The PSU Sustainability, Society and Resource Management students, along with the PSU Students for Sustainability and university faculty organize, support and participate in a variety of outreach efforts. A few examples are described below. Opportunities to become involved in these events will be posted through Canvas and the PSU Students for Sustainability Facebook page.

**Move Out Madness**

In conjunction SEK Recycling, collected multiple van and truck loads of things students no longer wanted (fridges, microwaves and many assorted items) during the move-out period and re-sold them for re-use at the SEK Recycling Center.

**Move-In Mayhem**

In conjunction SEK Recycling, we collected and recycled 3600 lbs of cardboard on move-in day.
Let's Connect!

Enroll in the CC-SSRM Canvas Community!
Hydroponics to Aquaponics: Sustainable Food Production

Story by: Jim Triplett, Professor Emeritus

The PSU Students for Sustainability (S4S) of are known for activities that promote sustainability on campus and within the Pittsburg community. Notably, the club begins the fall semester with Move In Mayhem (MIM), where they collect as much recyclable material, especially cardboard, as they can from the students and their families that are going through the process of setting up their living space in the dormitories. Funds for MIM are donated to the university recycling program. The spring semester concludes with Move Out Madness (MOM), in which the club places containers in the commons areas of dorms so students can place reusable items like hair dryers, microwaves, brooms and clothes for resale. Items collected in MOM are sorted, priced and sold at a garage sale at the local recycling center, and funds from the resale are utilized for student projects and travel, like the Growing Sustainable Cities Conference in Dubuque to which Students for Sustainability strives to attend yearly.

S4S is beginning a sustainable food production project focused on aquaponics and hydroponics in the fall of 2018. This new initiative came as a result of conversations between S4S advisors, students, and Enactus -- the student organization for business on campus -- during the Earth Day Celebration in the student union.

Dodge Mattingly, from Enactus, had a display that explained their project to set up hydroponic food production in Haiti. As he visited with those involved in Students for Sustainability, he noted Enactus had a prototype of the hydroponic unit that they wanted to donate to a group that would make good use of it. Since several of the S4S students had been pushing for a food production project, especially one that would provide a learning laboratory experience, it seemed like a perfect fit.

Enactus donated the hydroponic framework along with materials and supplies used to set up the prototype, down to the fertilizer and seeds. In addition, Dodge offered to share what they had learned and help S4S students get the system up and running. S4S is hoping Enactus will continue to be involved as a strategic partner once the system is online. Enactus previously established the hydroponic side of the project, but the aquaponics portion is a new addition, with plans to grow fish, such as tilapia. The waste from the fish will break down and provide nutrients for the plants that will use the nutrients to grow, cleaning the water before it is returned to the fish.

When properly balanced, the system provides extremely efficient food production in terms of resources, energy and space. The next step was where to place the project on campus in a location that would be accessible to students, unnoticed by the campus space committees and secure from outside tampering. As it turns out, the Biology greenhouse on the roof of Heckert-Wells was in the process of transitioning its oversight and activity. Since this project will involve a great deal of student learning and research, it seemed like a good use of available space. Dr. Dixie Smith, Biology Chair, Dr. Phil Harries, Greenhouse supervisor, and Kim Grissom, Biology preparatory, were all in favor of providing the space.

S4S picked up the hydroponic unit on the afternoon of May 11 and moved the hydroponic unit to the greenhouse on May 11; met for a planning session on May 21; and moved in part of the fish rearing and water recirculating system on the May 25th.

The project has caught the imagination and interest of an active and enthusiastic group of students that are investing their time and energy right after graduation to forge a new path in sustainable food production. For more information or to become involved email Braylyn Wilson at bcwilson@gus.pittstate.edu
Recent SSRM Graduates

Julie Adkins
NEPA Planner at US Army Corps of Engineers

Cody Cherry
Sustainable Energy Manager, Home Pro

Taylor Cunningham
Assistant City Manager- City of Joplin

Jordan Garbin
Peace Corpse. - Africa

Krystal Davis
Leavenworth County Planning and Zoning

Lucas Tuckel
Technician at ARKC Management

Cole Morrison
Director, Renewable Energy Division CDL

Eric Corkill
L&J Building Maintenance

Grace Fritz
Intake Coordinator at KVC Health Systems

Emily Lednicky
St. Joseph Community Gardens & Foundation

Rachel Magathan
Sustainability Professional Ernie Miller Nature Center
For more information about the PSU BIS: SSRM Degree
SSRM Program Coordinator
ssrm@pittstate.edu