Welcome Students!

The McCormick Office of Personal Development, also known as the MOPD, is dedicated to encouraging each undergraduate to explore personal strengths, values, and goals, and opportunities to build essential skills; engage with academic, professional, and extracurricular experiences in an intentional way; and transform into an adult with a clearly defined sense of purpose and the skill set to succeed.

Led by Assistant Dean Joe Holtgreive, Advisor Heather Bacon, Graduate Intern Tana Gahlinger, and the MOPD Student Advisory Board, the MOPD seeks to accomplish its mission through fostering the five core competencies: Awareness, Fidelity, Optimization, Resilience, and Self-Reliance.

Each quarter, the MOPD sponsors programs, guest speakers, workshops and events, focused on helping students develop the five core competencies and the skills to be life-long adaptive learners. The MOPD helps students learn about the variety of opportunities available at McCormick, choose experiences that serve their personal goals, and reflect on their experiences to better understand who they are and how they can reach their goals.

Visit the MOPD Website to learn more about the MOPD!
Meet the MOPD Board

The McCormick Office of Personal Development Student Advisory Board supports the mission of MOPD by contributing to the development, planning, and implementation of programs for McCormick undergraduates. Board members have significant input into MOPD programs and offer insight into the interests and needs of students.

New members to the board are currently under review and will be appointed in the upcoming weeks to serve out the remainder of the 2013-2014 academic year.

Isabelle Orrico
Class: Junior
Major: Computer Engineering
Hometown: New Jersey, now the Chicago ‘burbs
About: Outside of McCormick, I work as a center manager at Norris. I love running and spend a good amount of time at SPAC. My favorite part of MOPD thus far has been taking swing dance class and helping to put on the Tech Factor.

Alexandra Lamens
Class: Senior
Major: Mechanical Engineering
Hometown: Melbourne Beach, FL
About: I'm the Program Director for the Society of Women Engineers at Northwestern, and also a Center Manager at Norris. I'm on the club basketball team, and about 6 IM sport teams (they keep me from drowning in work). Other than that, I really like board games and Christmas music, and I'm hoping to go into product development or component design when I graduate. I would love to work in the sports industry but we'll see how the cookie crumbles.

Mindy Chua
Class: Senior
Major: BME
Hometown: Bellevue, WA and Manila, Phillipines
About: Besides taking classes, I am co-director of campaigns for GlobeMed and a volunteer at Mather Pavilion. I love to eat--I will pretty much try anything. My favorite foods include sweet potatoes, fried chicken, and soup!

Tana Gahlinger
Graduate Intern, MOPD
Hometown: Floyds Knobs, Indiana
About: I am pursuing a Masters in Higher Education Administration and Policy from SESP. I love working in the MOPD office, especially with students. Some of my favorite hobbies include boating, traveling, and scrapbooking when I can find the time!

New MOPD Board Members coming soon!
Upcoming Events

Theme Workshop
Learn about the theme component of McCormick degrees and which classes can help fulfill your theme requirements. Have your questions answered!

- November 4th
- 4:00 pm
- Seeley Mudd Library, Room 231

Study Abroad Fairs
Engineers really can study abroad! Two upcoming fairs will feature program options available to you. Get started planning your adventure of a lifetime!

<table>
<thead>
<tr>
<th>Study Abroad Fair</th>
<th>Global McCormick Fair</th>
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<tr>
<td>- Wednesday, November 13th</td>
<td>- Thursday, November 14th</td>
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<tr>
<td>- 2:00 -5:00 pm</td>
<td>- 11:00 am - 3:00 pm</td>
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<td>- Norris Louis Room</td>
<td>- Tech Institute Lobby</td>
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Featured Student Artist: Paige Janac
Paige’s interest in artwork began at an early age with an art class and never stopped. She finds time to complete her pieces while balancing her coursework in McCormick and believes that engineering and art have more in common than most people think!

Experience more of Paige’s work and learn about the inspiration behind some of her pieces.

Nominate a student artist for next quarter by emailing MOPD at McCPersonalDev@northwestern.edu

Featured Faculty Profile: Alex Birdwell
Professor Birdwell is involved with several courses in the Mechanical Engineering department and also works with the Segal Design Institute. He is proud of receiving his PhD and is passionate about teaching. His several hobbies include risbee, pottery, mountain biking and other outdoor activities, and spending time with his wife and daughter.

Learn more about Professor Birdwell on the MOPD website.

Nominate a faculty member to be featured next quarter by emailing MOPD at McCPersonalDev@northwestern.edu
Meet the New McCormick Advisers

McCormick has made exciting developments to the first-year advising system with the addition of four new McCormick Advisors. Beginning this academic year, these First-Year Advisors have joined the Undergraduate Engineering Office and are also teaching DTC courses. These advisors can provide curriculum guidance, advice on incorporating academic and extracurricular interests into the McCormick experience, and support to first-year students as they transition into college life.

Professor Ken Gentry

What did you enjoy most about your own years as an undergraduate?
I went to school in a city (Milwaukee) and my friends and I used our free bus passes to explore and find our favorite off-campus restaurants, shops, and clubs. It was always nice to escape the pressure of school work.

What excites you most about being a part of the Northwestern community?
I look forward to being on a smaller campus that still has world-class facilities in the Ford and Tech buildings. It is more difficult to carve out a community at a larger school.

Why were you drawn to working with freshmen?
Some first-year students come in with a definite plan for their undergraduate years and beyond and I hope to help them start their journey. For other students who are unsure, I believe that I can help expose them to the wealth of opportunities on campus so that they can start discovering the person they want to be.

Professor Janice Mejia

What did you enjoy most about your own years as an undergraduate?
As an undergrad at NU I really enjoyed my major (IEMS) and taking courses taught by the top faculty in their fields. I was also involved with different student groups on campus and joined a sorority. My favorite memories involve the people that I met and who remain my closest friends to this day.

What excites you most about being a part of the Northwestern community?
Northwestern is a community of phenomenal faculty, staff and students. It is an environment that pushes and challenges you intellectually as you explore your academic and personal interests.

Why were you drawn to working with freshmen?
Freshman year is an exciting time for all undergraduates. I would like to assist students as they transition to college and explore their academic interests and other opportunities outside of the classroom.
**Professor Emma DeCosta**

*What did you enjoy most about your own years as an undergraduate?*

I loved learning and being challenged by the coursework, and the opportunity to work with other students motivated to learn and grow. I loved going to lectures given by world class instructors who were able to provide perspective on what the world’s needs were and how science, engineering and technology contributed to addressing these needs. I also enjoyed the freedom to discuss, incubate, and grow ideas from seeds into reality.

*What excites you most about being a part of the Northwestern community?*

I am excited to work with such intelligent and motivated students to help them realize their dreams and aspirations. I am looking forward to working with faculty and staff to further this cause.

*Why were you drawn to working with freshmen?*

My own freshmen experience at MIT was a difficult transition, but one that nevertheless impacted my life in a positive way. For me, the opportunity to help others through this same process is intrinsically rewarding.

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**Professor Richard Freeman**

*What did you enjoy most about your own years as an undergraduate?*

Learning new and exciting things. I still own two books from my undergrad days, one I used five years later to explain Data Communications to my client.

*What excites you most about being a part of the Northwestern community?*

The opportunities to get involved with students working on design projects.

*Why were you drawn to working with freshmen?*

Freshmen come to college with all the possibilities in front of them. They are excited and are looking to fully develop into the next generation of Engineers. They are the students who are most in need of help determining their direction. I like being able to help students determine their path.
Major Advising Notes

Biomedical Engineering

- BME 101 is a required course and should be taken during your freshman or sophomore year. This is a non-credit course offered on Thursdays at 3 pm during the Winter and Spring quarters.

- BS-MS options – If you are a student who can complete the BS requirements in less than 4 years, you might want to consider the simultaneous BS/MS program, with both degrees in the same discipline or in different engineering disciplines. See [http://www.bme.northwestern.edu/graduate/masters/combined-bs-ms.html](http://www.bme.northwestern.edu/graduate/masters/combined-bs-ms.html)

- The Northwestern Undergraduate Premedical Scholars Program (NUPSP) is an early MD acceptance program into the Feinberg School of Medicine for high achieving Northwestern University undergraduate students with a demonstrated commitment to a career as a physician. If you are a junior who is interested in this program, the time to apply is now.

Electrical Engineering and Computer Science

- EECS 310 Mathematical Foundations of Computer Science and EECS 311 Data Structures and Data Management were renumbered as EECS 212 and 214, respectively starting this past fall.

- New sections of EECS 339 Introduction to Databases and EECS 349 Machine Learning have been added for the winter quarter.

- Special Topics courses this quarter include EECS 395 A Hands-on Course in Communications Systems and EECS 395 Geospatial Vision and Visualization.

- All EE majors are required to take a “capstone” Electrical Engineering Design course during their senior year. In the winter, this requirement can be fulfilled by taking a EECS 399 design project or EECS 347 Microprocessory Systems Project I. For a 399 project to count it must be taken when a student has senior standing and the student must file a form signed by the advisor that states that this is a suitable design project. Forms can be found in the EECS Undergraduate Study manual available at: [http://www.eecs.northwestern.edu/images/docs/undergrad_study_man.pdf](http://www.eecs.northwestern.edu/images/docs/undergrad_study_man.pdf)

Mechanical Engineering

- Beginning this year, the Mechanical Engineering Department will offer ME398 (Engineering Design) in a two-quarter sequence. During the transition, ME 398 will be offered this year as either the usual one-quarter class taken in the winter, or as an optional two-quarter sequence in the winter and spring. Students are encouraged to choose the two-quarter option in order to do more substantial projects, and the second quarter will count as one 300-level Tech Elective. The spring quarter class is only for the continuation of ME 398 projects started in the winter, not to be taken on its own.

- ME 377 (Heat Transfer-Winter) will be taught by Professor Neelesh Patankar.

- ME 377 (Heat Transfer-Spring) will be taught by Professor Manohar Kulkarni.

- ME 220 Thermodynamics (Winter and Spring) will be taught by Dr. Alex Birdwell.
**Chemical and Biological Engineering**

- Two sections of CHE 395: Special Topics will be offered – 1) Computer-aided Modeling of Reactive Systems, MW 4-5:50pm, and 2) Nanobiotechnology Review, MWF 3-3:50pm.

- Minor in Biotechnology and Biochemical Engineering provides training for students interested in the pharmaceuticals, biomaterials, biofuels, and other industries using the tools of modern biology. Find out more: [http://www.chbe.northwestern.edu/undergraduate/cert_biotech.html](http://www.chbe.northwestern.edu/undergraduate/cert_biotech.html)

- The Honors Program requires a two-quarter course sequence of independent study (Chem Eng 399) and three units of approved advanced study. If interested, contact your advisor and the Honors Program advisor (Prof. Cole).

**Materials Science and Engineering**

- Freshmen interested in MSE should be aware that they need Chemistry through Chem103/172.
- Sophomores should take MatSci 315; possibly CivE 216 (basic engineering) in Winter Quarter.
- Freshmen and sophomores – be aware of Meister summer research awards; you must have a project in place before the April 1 deadline. More info here.
- Juniors should take MatSci 351-1 and 331 in Winter Quarter. Consider applying for departmental honors – see criteria below *.
- Seniors should take MatSci 361 in Winter Quarter; if you will be starting a senior project (registering for MatSci 396-1), make sure you have a project arranged before the end of fall quarter. Questions? Dr. Stair
- More information on courses and scheduling can be found here.
- Summer research – students interested in research at NU or elsewhere should be aware of winter deadlines for undergraduate research grants and external research opportunities, such as NSF REU and DOE SULI programs. Note that (some) applications are now open.
- All students – be aware of MSE Student Awards honoring outstanding achievement. May 1 deadline. More info here.

- Options for Basic Engineering electives Winter 2014: EECS 202 (MTWF 10), EECS 221 (MTWF 9), EECS 222 (MTWF 2), ChBE 210 (MTWF 10 plus W lab), IEMS 310 (MW 11 plus M lab), IEMS 326 (TTh 11-12:20), EECS 203 (MTWF 11), EECS 205 (MTWF 2), EECS 328 (TBD), ESAPPM 367 (TTh 3:30 – 4:50), EECS 211 (MTWF 2 or 3), EECS 230 (MTWF 1), ChBE 312 (MTWF 2), IEMS 303 (MW 10 plus W lab).

- MatSci technical electives Winter 2014:
  - MatSci 318 Materials Selection (Carr) – MWF 4-4:50; pre-req 201 or 301
  - MatSci 333 Composites (Faber) – TTh 9:30 – 10:50; pre-req 316-1&2, 332.
  - MatSci 337 Conducting Polymers (Huang) MWF 12 - 12:50; pre-req MatSci 331; typical enrollment – senior undergraduate and graduate students.
  - MatSci 376 Nanomaterials (Rim) – TTh 11-12:20 – pre-reqs: Senior undergraduate or graduate students in materials science, engineering, chemistry, physics, or biology

- The Materials Science and Engineering Departmental Honors Program – Students may apply to this program after their sophomore year. Ate the time of application, the student’s cumulative GPA must be 3.50 or higher and the 3.50 must be maintained until graduation. Students must register for a quarter of MatSci 394 Honors Project prior to 396-1 and 396-2 Senior Project. If interested, discuss this with your academic and research advisors. The following form must be submitted to the Tech Registrar.
Featured Courses

PRDV 395, EI 101: Emotional Intelligence: Managing Yourself, Maximizing Your Potential

In this course, taught by Staff Psychologists David Shor, Ph.D. and Rob Durr, Ph.D., as well as Assistant Dean and MOPD Director Joe Holtgreive, students will study theories of EI and how it relates to personal and organizational success. Students will also have the opportunity to examine their social and emotional strengths and weaknesses and learn how to perceive and effectively manage emotions within themselves and with others.

Class# 34487 Tu Th, 4:00-5:20 p.m. Location: TBD

Start German in Winter Quarter in Tech!

During Winter Quarter: German 101-1 will be offered at 3:00 p.m. on MTuThF in Tech. This is a good opportunity to learn German before participating in a special program in Germany. During Spring Quarter: German 101-2 & 101-3 will be offered as an intensive course (2 units) on MTuThF 3:00-4:50. Complete the first year German sequence and acquire a basic conversational knowledge of the language as a foundation for study or internships in Germany!

Investigative Journalism, JOUR 373-0-20

This course through The Medill School of Journalism gives students the opportunity to investigate potential wrongful murder convictions and publish their findings. Supported by the Medill Justice Project, it is being offered in the 2014 Winter Quarter Mondays from 2:00-4:50 pm. Interested Juniors and Seniors should email Professor Klein at alec-klein@northwestern.edu for additional information and to request an application. Deadline to apply is Saturday, November 9th.

Opportunities

Kellogg Certificate Program for Undergraduates Information Session

Come listen to current students talk about their experiences and answer your questions about certificate programs in both Financial Economics and Managerial Analytics.

- Monday, November 4, 2013
- 5:15-6:15 p.m.
- Northwestern Room 202, Norris Center

CAPS Workshops

The Counseling and Psychological Services Office at Northwestern is offering several workshop series focusing on stress management for students.

Workshops include:
- Introduction to Mindfulness
- Mindfulness for Attention Problems
- Relaxation Techniques
- Success Strategies
- Biofeedback
- Plus drop-in meditation groups!

Find more info and sign-up at http://www.northwestern.edu/counseling/students/workshops/index.html
Helpful Hints from Heather!

Adviser Heather Bacon of the McCormick Undergraduate Advising Office is here to help you! The tips listed below will ensure your registration process goes smoothly.

⇒ Don’t forget to check CAESAR for any registration holds well in advance of your appointment time. If you click on a hold listed in your account, it will give you more details on how to have it removed.

⇒ Remember, you can only add up to 4.5 credits during registration. Once the new quarter starts you can add into a total of 5.5 credits without any special permission. Anything above 5.5 credits requires special permission and will also increase your quarterly tuition charges.

⇒ Engineers really can study abroad (I see it happen all the time). The Global McCormick Fair will be a great starting point for learning more about these opportunities. See the date/time in this newsletter.

⇒ Check out the MOPD website for more information about all the material found in this edition of the MOPD quarterly plus:
  - See tools for academic planning and major snapshots, highlighting features of each McCormick degree on the Academic Life page.
  - Watch videos of past presentations offered by the MOPD, plus Jeremy Hunter’s presentation on ways to concentrate your attention for success, available soon!