Contents

History of the Department of Agricultural and Biosystems Engineering ........................................................................ 5
ABEN Graduate Faculty .................................................................................................................................................. 6
ABEN Graduate Program .............................................................................................................................................. 7
On First Arrival .............................................................................................................................................................. 7
  Domestic Students .......................................................................................................................................................... 7
    Check in at the ABEN Main Office ................................................................................................................................. 7
    Complete required Graduate Student Training .................................................................................................................. 7
    Human Resources (HR)/Payroll’s Office ........................................................................................................................... 7
  Check in with your Faculty Advisor ................................................................................................................................. 8

International Students ....................................................................................................................................................... 8
  Check in at the ABEN main office ..................................................................................................................................... 8
    Social Security number (SSN) and Human Resources (HR)/Payroll’s office ................................................................. 8
  Check in with Your Faculty advisor .................................................................................................................................. 8
  Contact with the NDSU International Office .......................................................................................................................... 8
  Attend International Student Orientation ............................................................................................................................... 9
  Health Insurance for International Students and Dependents ............................................................................................ 9

General information ............................................................................................................................................................ 9
  Vacation ............................................................................................................................................................................... 9
  Sick Leave ........................................................................................................................................................................... 9

Travel Regulations ................................................................................................................................................................. 9
  In-State ............................................................................................................................................................................... 9
  Out-of-State ....................................................................................................................................................................... 9
  International Travel Policy ............................................................................................................................................... 9
  Travel Reimbursement ....................................................................................................................................................... 10

Vehicle Usage ....................................................................................................................................................................... 10

Office Facilities .................................................................................................................................................................... 10

Office and Miscellaneous ..................................................................................................................................................... 11
NDSU Graduate Program Policies and ABEN Degree Requirements

Seminar ............................................................................................................. 12
Dissertation Video .......................................................................................... 12
Changing Advisor ........................................................................................... 12
Checklist for MS ABEN Degree .................................................................... 12
Checklist for Ph.D. ABEN Degree ................................................................... 12

Required Training ............................................................................................ 13
Baseline Safety Training (Yearly) .................................................................... 13
Supervisor Safety Training (Yearly, Depending on Responsibilities) .......... 13
NDSU Laboratory Safety Training (Yearly) ...................................................... 13
Preventing Sexual Harassment/Title IX Training (Yearly) ......................... 13
Research Compliance (IRB, IACUC, and IBC) ............................................ 14
ABEN Shop Safety Rules (One time) ............................................................... 14

Environmental and Conservation Science (ECS)- Agricultural and Biosystems Engineering (ABEN) Dual Degree Option .......... 15

Attachment I: Checklist for New Agricultural and Biosystems Engineering Graduate Students ................................................................. 16

Attachment II: Links to Forms for MS Students ........................................... 16
Master’s Plan of Study ...................................................................................... 16
Request to Schedule Examination form ......................................................... 17
Report of Final Exam form ............................................................................. 17

Attachment III: Links to Forms for PhD Students ...................................... 17
PhD Plan of Study ........................................................................................... 17
Report of Preliminary Exam form ................................................................. 17
Report of Final Exam form ............................................................................ 17

Attachment IV: ............................................................................................... 17
Degree Application/Exit Survey ...................................................................... 17
IRB/IACUC/IBC Compliance Notification form ............................................ 17
History of the Department of Agricultural and Biosystems Engineering

Historical records indicate that E.S. Keene was appointed Agricultural Engineer with the Agricultural Experiment Station in 1892, two years after the North Dakota Agricultural College was established. R.C. Miller organized the Agricultural Engineering Department as a degree granting department in 1924-25. The first BS degree in Agricultural Engineering was granted in 1931. The first MS degree was awarded in 1933. BS and MS degree programs in Agricultural Mechanization (AM) were initiated in 1951. This program also provided service courses to Agricultural Education majors and to other degree programs in the College of Agriculture.

In 1980, an interdisciplinary Ph. D. program was established in the College of Engineering and Architecture. In 1989, the department hired its first food engineering faculty. The name of the Agricultural Mechanization program was changed to Agricultural Systems Management (ASM) in 1993. The Agricultural Engineering program name was changed to Agricultural and Biosystems Engineering (ABEN) in 1996. In 2000, a partnership was developed with John Deere to offer a “Dealership Management” specialization in the ASM program. This was one of only six such partnerships in the nation. John Deere, however, discontinued these partnerships in 2009. Since the specialization was not contractually bound to John Deere, the specialization continues to be offered. In June, 2002, a Ph. D. program in ABEN was approved by the State Board of Higher Education (SBHE). In Fall Semester 2007, two emphasis areas, Agricultural Engineering and Biosystems Engineering, were offered in the ABEN program to better serve the changing clientele of the program. The ABEN program was reviewed by ABET in 2012 and reaccredited.

Today the ABEN department continues to thrive and grow. We have active student groups and a dynamic student population. Our graduate program continues to attract high quality students from around the world. Our graduate students are involved in conducting cutting edge research focused on addressing the global challenges of food, water and energy security under the supervision of world-class faculty members. In 2015, NDSU President Dean Bresciani challenged the University to grow the graduate programs across the board. Our departmental goal is to double our graduate students in accordance with the University’s strategic planning.
# ABEN Graduate Faculty

<table>
<thead>
<tr>
<th>Faculty name</th>
<th>Responsibility (Research, Teaching, Extension)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sreekala G. Bajwa, Ph.D.</td>
<td>Chair; Research, Teaching, and Extension&lt;br&gt;Interests: Remote Sensing, Precision Agriculture, Unmanned Aerial Systems, Bio-composites</td>
</tr>
<tr>
<td>Thomas A. Bon, Ph.D.</td>
<td>Teaching, Student Advising and Capstone Projects&lt;br&gt;Research Interests: Machine Systems, Electronics and Instrumentation</td>
</tr>
<tr>
<td>Igathinathane Cannayen, Ph.D.</td>
<td>Research and Teaching Interests: Biomass Processing, Storage, Quality and Logistics, Machine Vision, Post Harvest and Food Engineering</td>
</tr>
<tr>
<td>Kenneth J. Hellevang, Ph.D.</td>
<td>Extension Engineer&lt;br&gt;Research Interests: Post Harvest Technology</td>
</tr>
<tr>
<td>Xinhua Jia, Ph.D.</td>
<td>Teaching and Research&lt;br&gt;Interests: Drainage and Irrigation Engineering, Hydrology, Evapotranspiration, Water Quality, and Agricultural Mulch</td>
</tr>
<tr>
<td>Zhulu Lin, Ph.D.</td>
<td>Teaching and Research&lt;br&gt;Interests: Water and Soil Resources, Environmental Modeling</td>
</tr>
<tr>
<td>Shafiqur Rahman, Ph.D.</td>
<td>Teaching and Research&lt;br&gt;Interests: Livestock Waste Management (composting, anaerobic digestion, and land application), Water Quality and Air Quality Assessment and Mitigation, Dust and Particulate Matter Emission</td>
</tr>
<tr>
<td>Thomas Scherer, Ph.D.</td>
<td>Extension Engineer&lt;br&gt;Research Interests: Soil and Water Resources Management, Irrigation Systems</td>
</tr>
<tr>
<td>Halis Simsek, Ph.D.</td>
<td>Teaching and Research&lt;br&gt;Interests: Water and Wastewater Treatment, Animal and Agricultural Waste Management</td>
</tr>
<tr>
<td>Dean D. Steele, Ph.D.</td>
<td>Teaching and Research&lt;br&gt;Interests: Irrigation and Environmental Engineering</td>
</tr>
<tr>
<td>Dennis P. Wiesenborn, Ph.D.</td>
<td>Teaching and Research&lt;br&gt;Interests: Food and Added Value Process Engineering for Food, Biofuels, and Other Bioproducts</td>
</tr>
</tbody>
</table>
ABEN Graduate Program

The Department of Agricultural and Biosystems Engineering offers graduate study leading to M.S. and Ph.D. degrees. The program emphasizes solving engineering problems for agricultural production, food and biofuels processing, and environmental resources management. Advanced work may involve specialized training in the following areas: irrigation and drainage engineering; agricultural hydrology; soil and water resources management; livestock waste management; air quality measurement and mitigation; process engineering for food and biofuels, bioenergy, and other bioproducts; agricultural machine systems; precision agriculture; machine vision and intelligent sensors for biological systems; and post-harvest handling and storage of biomass feedstocks and other biological materials.

Student research and academic programs are tailored to individual student needs and interests. Interdisciplinary approaches to agricultural and biosystems engineering programs are fostered.

On First Arrival

Domestic Students

Check in at the ABEN Main Office

On first arrival at NDSU, students should meet with ABEN Administrative Assistant for their office assignment, keys, and mailbox assignment (Attachment I). Students may meet with ABEN Account Technician to receive guidance on payroll processing. Students may talk to their faculty advisor regarding their office computer.

Complete required Graduate Student Training:

Human Resources (HR)/Payroll’s Office

Graduate students that will be working as an NDSU employee as a research assistant (RA) or as a graduate teaching assistant (TA) AND have never worked at NDSU or have not worked at NDSU for the previous 12 months will need to stop at the Human Resources/Payroll Department in order to complete their new hire paperwork. Please visit the ‘New Employee Information – Getting Starting’ webpage for additional information on what type of documentation to bring with. You may also call the Human Resources/Payroll Office directly at 701-231-8961 or contact them via e-mail at ndsu.hr@ndsu.edu if you have any additional questions. For graduate students that HAVE previously worked at NDSU within the last 12 months, you will not need to complete the New Hire package again, however there are a few forms and notices that you will need to complete and you can do so by stopping at the ABEN Account Technician’s office (ABEN Room 103).
Check in with your Faculty Advisor

If a faculty advisor has already been assigned to you, check with your advisor upon arrival. If advisor is not available on the day of your arrival, communicate with the advisor via email. Meet with your advisor to decide in which courses to enroll. To be considered a full time student without a 20 hour per week assistantship, you need to take a minimum of 9 credits per semester. If you have a 20 hour per week assistantship, you must take a minimum of 6 credits to be considered full-time.

International Students

Check in at the ABEN main office

On first arrival at NDSU, students should meet with the ABEN Administrative Assistant (ABEN 100) for their office assignment, keys, and mailbox assignment (Attachment I). Students should also visit with their faculty advisor for their office computer.

Social Security number (SSN) and Human Resources (HR)/Payroll’s office

Graduate students that will be working as an NDSU employee as a research assistant or as a graduate teaching assistant AND have never worked at NDSU or have not worked at NDSU for the previous 12 months will need to stop at the Human Resources/Payroll Department in order to complete their new hire paperwork. Please visit the ‘New Employee Information – Getting Starting’ webpage for additional information on what type of documentation to bring with. You may also call the Human Resources/Payroll Office directly at 701-231-8961 or contact them via e-mail at ndsu.hr@ndsu.edu if you have any additional questions. For graduate students that HAVE previously worked at NDSU within the last 12 months, you will not need to complete the New Hire package again, however there are a few forms and notices that you will need to complete and you can do so by stopping at the ABEN Account Technician’s office (ABEN Room 103).

Many international graduate students may need to visit the Social Security Administration locally in order to obtain a Social Security Number (SSN). The Social Security Office will need a letter verifying that you are a student and employee of NDSU. To receive a verification letter, please contact the ABEN Account Technician by stopping at ABEN Room 103 or by calling 701-231-7262 for assistance.

Check in with Your Faculty advisor

If a faculty advisor has already been assigned to you, check with your advisor upon arrival. If your advisor is not available on the day of your arrival, communicate with him or her via email. Meet with your advisor to decide in which courses to enroll. To be considered a full time student without a 20 hour per week assistantship, you need to take a minimum of 9 credits per semester. If you have a 20 hour per week assistantship, you must take a minimum of 6 credits to be considered full-time. For additional information, please consult with your international student advisor.

Contact with the NDSU International Office

To maintain immigration status, all international students are required to update their home address and employer address within 10 days of arrival or any change in address. If you are an F-1 or J-1 student, please click here to fill out a form and let us know your current information so we can ensure your SEVIS record is up-to-date! Visit http://www.ndsu.edu/international/new_graduate_students/ for additional information.
Attend International Student Orientation

The International Student and Study Abroad Services Office requires all new International students to attend an orientation session prior to the start of the semester. Please review orientation dates and other arrival information at [http://www.ndsu.edu/international/orientation/](http://www.ndsu.edu/international/orientation/).

Health Insurance for International Students and Dependents

Health care in the United States is expensive and the individual is responsible for paying medical costs. The government does not pay for it. See the Health Insurance for International Students policy at [http://www.ndsu.edu/international/insurance/](http://www.ndsu.edu/international/insurance/). For additional information, please consult with your international student advisor.

General information

Vacation

A graduate student is considered a ‘non-benefitted’ employee, and therefore is not eligible to earn any vacation leave time. In the event that you would need to take any time off, please contact your faculty supervisor in advance. For extended leave, consult with your advisor, student coordinator, and account technician in the department.

Sick Leave

Similar to vacation leave, the non-benefitted graduate student employee is not eligible to earn any sick leave time. In the event that you would need to take any time off due to an illness, please contact your supervisor.

Travel Regulations

In-State

Graduate students may be asked to travel within the state for projects they are working on. Please discuss any travel plans with your faculty supervisor.

Out-of-State

Any time a graduate student travels out-of-state (or out of the country) related to a project that they are working on in conjunction with faculty member, a ‘Travel Authorization – Out-of-State’ web form must be completed and sent to your faculty supervisor for further approval. The faculty supervisor would first approve the request and then forward to the department chair, who in turn would forward to the Dean’s Office, and for international travel would forward to the Provost’s Office for final approval. All out-of-state and international travel requires pre-approval, preferably 10 working days, before spending any money on travel.

International Travel Policy

The internal process within the North Dakota Agricultural Experiment Station stipulates that all international travel requests be submitted at least 30 days prior to the travel. While exceptions may be made, they are limited. Booking tickets for an international flight should be made early in order to
secure the best prices. For additional information on “international travel policy” – please visit https://www.ag.ndsu.edu/academics/for-college-faculty-staff.

Travel Reimbursement

When traveling outside the NDSU/Fargo area for work on a project, graduate employees may be eligible for travel-related expenses such as lodging reimbursement, meal reimbursement, etc. Please visit with your faculty supervisor regarding budgeted travel expenses and to obtain funding information. If your travel has not been pre-approved, you will not receive reimbursement for your travel expenses.

A travel reimbursement form has been created to assist with documenting what travel expenses were incurred. Blank copies of the travel reimbursement form may be found in ABEN Room 100 by the faculty/staff mailboxes or you may request an editable ‘soft-copy’ of the form by contacting the Account Technician (ABEN Room 103 or call 701-231-7262).

Vehicle Usage

Please note, that you must hold a valid USA / state driver’s license (learner permit is not a valid license) OR if you hold an international driver’s license you must also be carrying an “International Driving Permit” in order to drive a state fleet vehicle. Please familiarize yourself with the full list of policies related to driving a motorpool vehicle by visiting the following website: http://www.dot.nd.gov/manuals/fleet/fsmanual.pdf. If you have any questions, contact your faculty supervisor.

As a graduate student, you may be required to travel to labs across campus, to field experiments, to attend and present at technical meetings etc. where you may need to use a State Fleet vehicle. You will have two options to use a state motorpool / state fleet vehicle: 1) by making a motorpool reservation which reserves a vehicle in advance – (contact the ABEN administrative assistant ABEN Room 100 who will assist with making the reservation) or 2) for short-term use of a vehicle (few hours at a time) by using one of the departmental permanent state fleet vehicles that are parked behind the ABEN building. There is a dry erase / grease board in the shop area near the rear door that should be used to reserve and keep track of those vehicles. Within the vehicles, there will be a ‘Driving Log’ that needs to be completed for every trip that is made. You will need to record your name, your destination, the beginning odometer reading, the ending odometer reading when you return the vehicle, and the funding number that the mileage expense will be charged to. Please check with your faculty supervisor in advance for funding information, if you’re unsure.

Office Facilities

The graduate student will be assigned a desk as available in an office or laboratory in the Department building or in a lab/office space in another building. Your designated desk or office may not be changed without permission of office staff. You will be expected to maintain an organized and clean office space.

Keys to outside doors are obtained from the department secretary. The graduate office area, study rooms, library and research laboratories are available to graduate students 24 hours a day, seven days a week. All keys must be returned when the student leaves the department – please do not forget to
return them. If you invite other students into the building, you are responsible for their conduct while here. The office and building keys are not to be shared with others.

**Office and Miscellaneous**

1. **Office Hours:** Regular working hours are from 8 a.m. to 5 p.m. with a one-hour lunch break. During the summer and semester breaks, the hours change to 7:30 a.m. to 4 p.m. with a one half-hour lunch break. Graduate students with greater than or equal to half-time assistantships are expected to maintain these hours.

2. **Printing and Photocopying:** Graduate students may be given an access code to use the department printer for printing and photocopying. Department printers and photocopiers should be used for work-related tasks only. Photocopying for personal use should be done at the Memorial Union or Library at the student’s expense. Archives of some older department publications may be available. See the office staff to get reprints.

3. **Computer Use:** Graduate students may be assigned a computer for research or academic purposes. These computers are NDSU property and their use is governed by the Acceptable Use of Electronic Communication Devices Policy - NDSU Policy 158. Additional student Acceptable Use Guidelines can be found at [http://www.ndsu.edu/fileadmin/www.its.ndsu.edu/security/Acceptable_Use_Student-010313.pdf](http://www.ndsu.edu/fileadmin/www.its.ndsu.edu/security/Acceptable_Use_Student-010313.pdf). Students should speak with their advisor if additional software needs to be installed. Students are responsible for backup of their own data and other files; students are encouraged to use online or hardware-based backup tools.

**NDSU Graduate Program Policies and ABEN Degree Requirements**

Visit the Graduate School websites below for graduate program policies:

Updated Master’s Program Policies may be found at: [http://bulletin.ndsu.edu/graduate/graduate-school-policies/masters-program-policies/](http://bulletin.ndsu.edu/graduate/graduate-school-policies/masters-program-policies/)

For additional Master’s Degree Requirements in Agricultural and Biosystems Engineering, please visit: [https://www.ndsu.edu/aben/current-students/graduate/graduate-studies/degree-requirements](https://www.ndsu.edu/aben/current-students/graduate/graduate-studies/degree-requirements)

Updated Doctoral Degree Policies may be found at: [http://bulletin.ndsu.edu/graduate/graduate-school-policies/doctoral-degree-policies/](http://bulletin.ndsu.edu/graduate/graduate-school-policies/doctoral-degree-policies/)

For additional PhD Degree Requirements in Agricultural and Biosystems Engineering, please visit: [https://www.ndsu.edu/aben/current-students/graduate/graduate-studies/degree-requirements](https://www.ndsu.edu/aben/current-students/graduate/graduate-studies/degree-requirements)
Seminar

It is recommended for all Ph.D. candidates to provide a seminar in the department before their graduation. This can be arranged in consultation with the student’s major advisor and the department’s seminar committee chair.

Dissertation Video

Doctoral students are required to submit a three minute video summarizing their dissertation research for a lay audience to the Graduate School. The video should be produced during your final semester of study. Additional information can be found at http://bulletin.ndsu.edu/graduate/graduate-school-policies/doctoral-degree-policies/#dissertationtext.

Changing Advisor

To change an advisor and research area, the student must provide valid justifications requesting this change to the Department Chair. In that case, the previous advisor must agree to release the student and another faculty member must agree to be the student’s advisor. Students may request to change their current advisor by completing the Request for Change to Plan of Study/Supervisory Committee form, which is available at http://www.ndsu.edu/fileadmin/gradschool.ndsu.edu/Forms/Student_Forms/Request_for_Change.pdf.

Checklist for MS ABEN Degree

Required by Graduate School

- Plan of Study & Advisory Committee (must be approved by the advisory committee, the ABEN Chair, and the Graduate School Dean)
- Written thesis presented to the advisory committee
- Thesis defense (“Final Examination” conducted as an oral exam by the advisory committee; must schedule in advance through the Graduate School; see form)

Highly recommended (may be required by student’s advisor)

- Written research proposal presented to the advisory committee in a meeting (prepared under the guidance of the advisor), preferably in the first year
- One or more research presentations at a professional society meetings
- One or more refereed journal articles as first author
- ABEN department seminar, open to the public, at or near the time of the thesis defense

Checklist for Ph.D. ABEN Degree

Required by Graduate School

- Plan of Study & Advisory Committee (must be approved by the advisory committee, the ABEN Chair, and the Graduate School Dean)
- Comprehensive examination ("Preliminary Examination" conducted by the advisory committee with both oral and written components; must schedule in advance through the Graduate School; see form)
- Written dissertation presented to the advisory committee
- Dissertation defense ("Final Examination" conducted as an oral exam by the advisory committee; must schedule in advance through the Graduate School; see form)
- Video summary of the dissertation, not to exceed 3 minutes

**Highly recommended (may be required by student’s advisor)**

- Written research proposal presented to the advisory committee in a meeting (prepared under the guidance of the advisor), preferably in the first year
- Two or more research presentations at professional society meetings
- Two or more refereed journal articles as first author
- ABEN department seminar, open to the public, at or near the time of the dissertation defense

**Required Training**

**Baseline Safety Training (Yearly)**
Visit https://www.ndsu.edu/hr/training/annual_training/. Select ‘Baseline Safety Training’ under the Annual Training heading. All graduate students are required to complete the Baseline Safety Training annually. This training is offer periodically throughout the year by the NDSU Safety Office or can be completed online through the Safety Office website. Log in is required for online training.

**Supervisor Safety Training (Yearly, Depending on Responsibilities)**
Any students supervising other employees such as a laboratory assistant or an undergraduate research assistant are required to take the additional Supervisor Safety Training module. Log in is required for online training.

**NDSU Laboratory Safety Training (Yearly)**
Visit www.ndsu.edu/hr/training/annual_training/

Select appropriate training courses listed under Annual Position Dependent and Other Requirements heading, after consulting with your ADVISOR. Log in is required. You will need to login using your NDUS username and password (the same as you use to view your paycheck or class schedule), then review the training material and take the associated quiz.

**Preventing Sexual Harassment/Title IX Training (Yearly)**
Training to Prevent Sexual Harassment and Title IX Training are required for all NDSU employees annually, including graduate assistants. Training must be completed after July 1 of each year. This is very important and it is the Department's intent to make sure that we achieve full compliance. Visit
www.ndsu.edu/hr/training/annual_training/ Select ‘Preventing Sexual Harassment/Title IX Training’ under the Training Courses heading. Log in is required.

In addition to the above training, you may verify your compliance by utilizing the NDSU Training App, found at https://apps.ndsu.edu/traktraining/. This will allow all those employed by NDSU to remain current on their required training.

**Research Compliance (IRB, IACUC, and IBC)**

If a graduate student’s research project involves human, animal, or biohazard subjects, it must be submitted for review and approval by the Institutional Review Board (IRB), the Institutional Animal Care and Use Committee (IACUC), and/or the Institutional Biosafety Committee (IBC). If students’ research involves any of the human, animal, or biohazard subjects, an appropriate approval letter is needed before initiating a research. A copy of the appropriate approval letters is required when the dissertation is submitted for editing. Additional information can be found at https://www.ndsu.edu/gradschool/graduating_students/dtp/research/#c150158. Compliance notification form can be downloaded at:

[http://www.ndsu.edu/fileadmin/gradschool.ndsu.edu/Forms/Student_Forms/Disquisition_IRB_IACUC.pdf](http://www.ndsu.edu/fileadmin/gradschool.ndsu.edu/Forms/Student_Forms/Disquisition_IRB_IACUC.pdf)

**ABEN Shop Safety Rules (One time)**

Please see Julie Bietz, the ABEN Department’s Student Services Coordinator, in ABEN 102 to obtain a form for completion. Submit the completed form to Julie.
Environmental and Conservation Science (ECS)-Agricultural and Biosystems Engineering (ABEN) Dual Degree Option

Students have the option of earning a dual graduate degree in Environmental and Conservation Sciences and in Agricultural and Biosystems Engineering. If a student wishes to pursue an ECS-ABEN dual degree but does not have a B.S. degree in engineering he or she must complete a set of basic engineering courses as specified on the Degree Requirements page of the ABEN Graduate Studies website (see https://www.ndsu.edu/aben/current-students/graduate/graduate-studies/degree-requirements/).

Specifically, such students must take the following fundamental courses prior to attaining either an M.S. or Ph.D. degree from ABEN, including dual ECS-ABEN degrees. If the courses (or their equivalent) were not taken prior to matriculating at NDSU, they should be taken in addition to other coursework required for the graduate degree.

- Differential Equations (NDSU: Math 266)
- Statics (NDSU: ME 221) and Dynamics (NDSU: ME 222); these two may be substituted by a calculus-based Physics I class
- Thermodynamics (NDSU: ME 350); may be substituted with ABEN 644 which may also count toward the graduate degree
- Fluid Mechanics (NDSU: CE 309 or ME 352)
- Physics II/Electricity and Magnetism (NDSU: PHYS 252)

The major advisor may appeal to the ABEN Graduate Committee (not the student’s graduate advisory committee) for substitutions or waivers of these requirements.

It should be noted that undergraduate courses are not subject to tuition waivers from the Graduate School and funding sources may also not allow tuition for undergraduate courses. It is up to the major advisor and student to decide how tuition for these courses will be paid for. It is a reasonable expectation that the student may be required to cover such costs. Availability of this option gives a chance to students and broadens the ABEN program portfolio and possibly attracts additional students into our program.
Attachment I: Checklist for New Agricultural and Biosystems Engineering Graduate Students

<table>
<thead>
<tr>
<th>Check when Completed</th>
<th>Task/Objective</th>
<th>Contact Person</th>
<th>Location</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>International students – contact International Advisor</td>
<td></td>
<td>Memorial Union</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Payroll (high priority)</td>
<td>Sara Ogundolani</td>
<td>ABEN 103</td>
<td>701-231-7262</td>
</tr>
<tr>
<td></td>
<td>etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- International students – contact International Advisor, Memorial Union
- Payroll *(high priority)* – Julie Bietz, ABEN 103, phone 701-231-7273
- Provide required documentation to Human Resources, Stop-N-Go Center
- Shop Safety Rules – Julie Bietz, ABEN 103 – 701-231-7273
- Permission to enroll in courses – Julie Bietz, ABEN 103 – 701-231-7273
- Photo for dept. web page – Julie Bietz, ABEN 103 – 701-231-7273
- Keys – Melanie Ziegler, ABEN 100 – 701-231-7261
- Office space – Melanie Ziegler, ABEN 100 – 701-231-7261
- Card access – Melanie Ziegler, ABEN 100 – 701-231-7261
- Mailbox – Melanie Ziegler, ABEN 100 – 701-231-7261
- Computer – Jana Daeuber, ABEN 125 – 701-231-7264
- Bison card – Bison Card Center, Memorial Union
- Annual online training for NDSU employees
  - [http://www.ndsu.edu/hr/training/annual_training/](http://www.ndsu.edu/hr/training/annual_training/)
    - Baseline Safety
    - Sexual Harassment – Title IX
    - Fraud training

Attachment II: Links to Forms for MS Students

Master’s Plan of Study

[http://www.ndsu.edu/fileadmin/gradschool.ndsu.edu/Forms/Student_Forms/Masters_POS.pdf](http://www.ndsu.edu/fileadmin/gradschool.ndsu.edu/Forms/Student_Forms/Masters_POS.pdf)
Attachment III: Links to Forms for PhD Students

PhD Plan of Study
http://www.ndsu.edu/fileadmin/gradschool.ndsu.edu/Forms/Student_Forms/Doctoral_POS.pdf

Request to Schedule Examination form
http://www.ndsu.edu/fileadmin/gradschool.ndsu.edu/Forms/Student_Forms/Request_to_Schedule_01.pdf

Report of Preliminary Exam form

Report of Final Exam form

Attachment IV:

Degree Application/Exit Survey
https://ndstate.co1.qualtrics.com/jfe/form/SV_eYfhFPLxMD8HTLv

IRB/IACUC/IBC Compliance Notification form
http://www.ndsu.edu/fileadmin/gradschool.ndsu.edu/Forms/Student_Forms/Disquisition_IRB_IACUC.pdf