

Questions and Answers

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About the Business IT Ph.D. Program at Virginia Tech

Disclaimer: This Q&A document only pertains to program-level details of the full-time BIT Ph.D. program at the Pamplin College of Business at Virginia Tech. This information does not apply to other programs or departments. Whereas these answers may reflect general policies and procedures of our program, this is not an official policy document, and thus is provided for informational purposes only. These answers are likewise subject to change, as the needs and requirements of the program change.

Any further follow-up questions should be directed to BIT Ph.D. program director, Prof. Paul Benjamin Lowry at bitphdadmin@vt.edu

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ADMISSIONS QUESTIONS

[Application Process] How do I Apply?

Like all graduate programs at Virginia Tech, you will formally apply to the Ph.D. program in BIT by first applying to our Ph.D. program through the graduate school website. The graduate school ensures that you meet all basic VT graduate school requirements and that your application materials are complete. If you meet the basic graduate school requirements and your application is complete, your application is then sent directly to the BIT department.

The **final decision** to offer a student acceptance into the BIT Ph.D. program is made at the department level only.

For more information and to apply, please go to the following website: https://graduateschool.vt.edu/.

The graduate school website also has additional information to help with international student applications, concerning visas, financial support, language requirements, and the like.

When you fill out your online application at this website, be sure that you select "Pamplin College of Business" as the college; and "Business Information Technology (BIT)" as the department; and "Ph.D." as the program of study.

[Application Process] What is the Deadline?

We officially have three potential entry points into our program, with the primary one being Fall (starts usually around late August) For Fall start, we accept applications through the graduate school website every year through February 1. We then make decisions and offers around the March/April timeframe.

Hypothetically, we can also start students in the Spring semester, in early January and possibly start students in late Spring, approximately around June, but in practice this only applies for exceptional students with exceptional cases (e.g., deferrals of admission, student in upper 99 percentile, transfer students) because we rarely have open available Ph.D. slots for these entries. Students in these situations who believe they are unusually promising and have extenuating circumstances should contact the program director directly about this.

We do not accept late applications after application deadlines, especially for Fall entry.

<u>Please do not contact any member of the BIT department, including administrators or Dr. Lowry to check on the status of your application.</u> All application status information is handled through the graduate school and is posted to the application system for which you will establish login credentials (i.e., Slate). The BIT department sees what you see and thus has no further information. If you suspect there is an issue with your application, please contact the graduate school via the contact information on their website.

However, if you have any questions or concerns about your application to the BIT Ph.D.— especially in terms of questions about the nature of the program, coursework requirements, research areas, and so forth, please contact Prof. Lowry, the BIT Ph.D. Program Director directly at: bitphdadmin@vt.edu

[Admission courses] Are there specific course requirements for admission?

No, there are no specific course requirements for admission, per se. However, we are a Ph.D. program that naturally attracts highly qualified candidates. Given the disciplines and approaches we focus on (i.e., IS/IT, OM/OR/MS, Analytics/Big data, Security/Privacy), we expect all of our candidates to provide a reasonable demonstration of coursework, certifications, self-learning, or work experience in the following core areas:

- 1. Mathematics and statistics
- 2. Computer programing
- 3. Authoring scientific papers
- 4. Quantitative and qualitative skills in solving interdisciplinary technology or data problems

It is also a <u>positive consideration</u> in evaluating your application, but not a requirement, to have a master's degree and/or work experience and/or research experience. If you do not have a master's degree or substantial work experience, you can expect to enroll in more elective coursework, to ensure that you have a solid foundation in your area of emphasis.

We understand that many promising students will have different strengths and weaknesses in these core areas. We can work with this, as part of the purpose of our rigorous coursework and seminars is to further strengthen your preparation for research. However, students will be less competitive if they are weak in two or more of the following areas: (1) mathematics and statistics, (2) computer programing, (3) authoring scientific papers, and (4) quantitative and qualitative skills in solving interdisciplinary technology or data problems.

Within this baseline, we can fully support students who want to pursue a wide combination of Ph.D. and discipline foci, such as, but not limited to the following fields and topics of study:

- Operations Management, Supply Chain, Management Science
- Information Systems, Information Technology, and Design Science
- Business Analytics, Data Analytics, and Artificial Intelligence
- Security, Privacy, and Trust

Aside from choosing a field or fields of study, students will generally choose one of three different Ph.D. methodological tracks that are provided on the college-level:

- 1. Behavioral or organizational research methods (5 courses)
- 2. Quantitative and econometric research methods (5 courses)
- 3. OM/OR/MS Track (5 courses)

Thus, in the end, BIT Ph.D. students will choose key fields and topics of their research interest and specialize in specific methodologies. This allows for many different combinations of research foci, such as:

- Behavioral, managerial, or organizational approaches to IS/IT, OM, or Security/Privacy/Trust topics.
- 2. Technical, programming, and design science approaches to IS/IT and Security/Privacy/Trust topics.

- 3. Data-centric, data science, datamining, and analytics approaches to IS/IT, OM/OR/MS, and Security/Privacy/Trust topics.
- 4. Mathematical, quantitative, simulation, optimization, and engineering approaches to OM/OR/MS topics.

Note: OM = operations management; OR = operations research; IS = information systems; IT = information technology; MS = management science

[Admission minimum requirements] Are there any minimum requirements for admission?

In general, the following are the $\underline{\text{minimum}}$ requirements for admission (but those can vary according to the applicant's profile):

- 1. GRE or GMAT scores in 90th percentile (95th or higher is preferable)
- 2. English competency, as demonstrated by (1) TOEFL/IELTS, (2) advanced graduate study at an English-only program, or (3) native English speaking and writing.
- 3. Master's degree (unless one has exceptional research, work, or undergraduate record)
- 4. Master's degree GPA of 3.70 or higher
- 5. Undergraduate degree GPA of 3.50 or higher

[English] Is there an English proficiency requirement for International Ph.D. students?

Yes, the VT Graduate School requires that all non-U.S. citizens or non-U.S. permanent residents demonstrate English proficiency to ensure they enter the university with sufficient English skills. However, this may be demonstrated in a number of ways, including <u>one</u> of the following:

- 1. International applicants are exempt from demonstrating English proficiency if are U.S. permanent residents ("green card" holders).
- 2. International applicants can demonstrate English proficiency if they received a bachelor's <u>or</u> master's degree from an accredited university where English is the <u>medium of instruction</u>.
- 3. International applicants can demonstrate English proficiency if they have a recent TOEFL score
 of 90 (IBT) or an IELTS score of 6.5 for admission.
 - Further, TOEFL scores of 20 or greater in Listening, Writing, Speaking, and Reading subsections are required.
 - If admitted, you will be eventually appointed as a Graduate Teaching Assistant, and thus
 you are expected to have scored 25 or greater on the TOEFL Speaking subtest (but this is
 not a strict admission requirement; and our department is less concerned about this
 because we only require the teaching of one course, late in the program; giving plenty of
 time to improve speaking skills).

More details on these graduate school requirements can be found at: https://graduateschool.vt.edu/admissions/how-to-apply/testing-requirements.html

Keep in mind, these are <u>basic requirements</u> to be considered for admission by the VT Graduate School. Once the BIT Ph.D. candidates pass this screening from the graduate school, the candidates are then evaluated by the BIT department for final admission decisions.

The BIT department does not add any other English baseline requirements, but higher testing scores are always a positive (the VT catalog lists our department's TOEFL requirement as 100, but this is flexible and not strictly enforced by us, so it's really **not** a requirement). More importantly, international candidates who become finalists for admission are **required** to have a live video interview (e.g., via Zoom or Skype) with at least one of our faculty members, to assess their motivation, preparation for Ph.D. school, spoken English, financial and personal readiness for a Ph.D., fit for the program, quality of research potential, answer the student's questions and concerns, and so forth. For finalists, this interview (and the student's research plans/proposal) has a more direct influence on admissions decisions than baseline requirements.

Also see suggestions on providing a "Writing Sample."

[Admission Interviews / Visits] Is an interview or visit required for admission?

No, we do not require physical interviews or visits for admission. In fact, we do not allow visits or interviews with faculty until an applicant is considered in the "final pool" of applicants. We simply have too many applicants to accommodate early visits of applicants.

Instead, we only require online live interviews of applicants who make it to the final screening round, and this is usually in the February timeframe. In this case, we will reach out to each finalist to arrange for an online interview (e.g., via Zoom or Skype). Certainly, physical interviews are allowed, if that is convenient to the candidate. We do not interview anyone who is not a finalist.

However, if you would like to arrange with the graduate school to take an official tour of the campus and to look at the facilities and campus, we would encourage you to do that any time at your convenience. Typically, one-week minimum notice is required. To sign up for such a campus tour, click here.

[Statement of Purpose] What should I address in my "Statement of Purpose" and is there any length limitation?

There is no length limitation or specific requirement in what you cover in your "Statement of Purpose." Nevertheless, we would encourage candidates to be focused, succinct, and to use this as an opportunity to "sell" themselves but to also help us better decide on their fit for our program and their potential. Remember, we receive a large number of applications; thus, you should try to write a statement that is helpful, interesting, and concise. Some of the more important items you may want to consider covering include, but are not limited, to any of the following:

- 1. * What makes you especially prepared to succeed as a Ph.D. student and an academic researcher?
- 2. * What are your research interests in terms of research topics and methods, and what exactly do you want to study during your Ph.D.?
- 3. * What are your goals and motivations for earning a Ph.D. and what do you want to do with it?
- 4. *Do you have any unusual circumstances, abilities, hardships, accomplishments, work experience, etc., that would be especially important for us to know about to better consider your application?
- 5. Which 2-3 faculty members do you see yourself potentially working with and why?
- 6. Why are you applying to the BIT Ph.D. program at VT?

^{* =} something we especially want to learn about you through your application packet in general.

[Translation] If I have some transcripts that are not in English, do these need to be translated?

Yes. Please do so when sending on your application to the VT Graduate School, for their formal screening to assess your credentials, which is then sent on to the BIT department for a final decision. Importantly, non-English transcripts must be translated by an **independent professional service**. The graduate school does not require any specific professional service; however, you are safest going with the ones that VT recommends for undergraduate admissions (listed below). Contact the graduate school in advance if you want to use another service to ensure it provides their translation requirements. Importantly, these professional organizations do not just provide a translation, they provide a formal evaluation of your academic credentials:

Academic Credentials Evaluation Institute, Inc.

9461 Charleville Blvd, Box #188 Beverly Hills, CA 90212 USA Phone: (310) 275-3530 Fax: (310) 275-3528

Web: www.acei-global.org E-mail: acei@acei-global.org

Global Credential Evaluators

P.O. Box 9203

College Station, TX 77842-9203 USA

Phone: 800-707-0979 Fax: 512-528-9293 Web: <u>www.gceus.com</u>

Educational Credential Evaluators, Inc. (ECE)

P. O. Box 514070

Milwaukee, WI 53203-3470 USA

Phone: 414-289-3400 Fax: 414-289-3411 Web: <u>www.ece.org</u> Email: <u>eval@ece.org</u>

Josef Silny & Associates, Inc. International Education Consultants

7101 SW 102 Avenue Miami, FL 33173 USA Phone: 305-273-1616

Fax: 305-273-1338; Translation Fax: 305-273-1984

E-mail: <u>info@jsilny.com</u>
Web: <u>www.jsilny.com</u>

World Education Services (WES)

ATTN: Documentation Center Bowling Green Station P.O. Box 5087 New York, NY 10274-5087 USA

Phone: (212) 966-6311 Fax: (212) 739-6100 Web: <u>www.wes.org</u>

[Writing sample] Is a writing sample required for admission?

Writing samples are not required for admission but providing at least one writing sample is strongly encouraged to strengthen your case. We are especially interested in three forms of writing: (1) examples of any co-authored work in peer-reviewed publications (or under review); (2) formal Masters' thesis, formal senior project, or honors thesis; and (3) advanced academic papers from coursework or industry. Please be judicious and only send us your best examples and no more than four writing samples.

GENERAL BIT PH.D. PROGRAM QUESTIONS

[Coursework] What is the Required and Elective Coursework?

Please see the "requirements" section of our website, at the following link: https://bit.vt.edu/academics/graduate-programs/phd-program/requirements.html

[Coursework] Do you have example plans of study?

Please see the "requirements" section of our website, at the following link: https://bit.vt.edu/academics/graduate-programs/phd-program/requirements.html

[Fields of Study / Disciplines] Which Fields of Study or Disciplines can I Specialize In?

Several highly marketable interdisciplinary emphases can be chosen as fields of study, including but not limited to, including combinations thereof:

- Operations Management, Supply Chain, Management Science
- Information Systems, Information Technology, and Design Science
- Business Analytics, Data Analytics, and Artificial Intelligence
- Security, Privacy, and Trust

To further specialize, and with appropriate qualifications, you also have the ability to take elective courses in a number of Ph.D. programs (and advanced master's courses) in complementary reference disciplines, including, but not limited to:

- a. Accounting and Information Systems
- b. Management
- c. Marketing
- d. Computer Science
- e. Economics
- f. Industrial and Systems Engineering
- g. Mathematics
- h. Psychology
- i. Statistics

Commented [pbl1]: This is woefully outdated; once we get the curriculum further fixed, I'm going to need to your help updating the website with this and more

Commented [pbl2]: We don't have example POS and ways to traverse through to graduation (e.g., 4-year plan, 5-year, transfer student, different tracks, etc.) this needs to be done but we need a more solid curriculum plan

[Financial] What is the Financial Support Offered for the Program?

In short, all admitted full-time Ph.D. in BIT students are fully funded to attend for four to five years. Four years is the minimize expected course for the Ph.D. program, but several students elect to take a fifth additional year to better prepare their research publications to maximize their placement in the academic market.

The typical baseline financial support is around \$35,500 per year, with full tuition waivers, for five years. We also provide:

- During the first two summers students are given additional summer support of \$6,000 each summer for conducting their own research.
- In subsequent summers additional summer support for research is awarded on a competitive basis and additional higher levels of compensation is available for voluntary teaching.
- Generous financial support for multiple conference visits.
- When needed, students are provided with reasonable funding for software, data, access to virtualized servers, and access to high-performance computing. Moreover, quality refurbished hardware is available to students who do not have their own PCs or laptops.
- We only require students to teach one courses before graduating; we invest in your research training and do not burden you with the heavier teaching most programs require.
- Access to subsidized student health insurance, if needed.
- Additionally, students may apply for outside fellowships for additional funding (we highly recommend added fellowships from <u>The Ph.D. Project</u> for minority students, which the Pamplin College of Business actively supports) or <u>fellowships through the Graduate School</u>

Also keep in mind that Blacksburg, VA has a <u>much lower cost of living</u> than universities that are located in virtually any large city—especially East Coast and West Coast cities.

Commented [pbl3]: This will need to be further updated when the official graduate school increases go into effect this Fall

[GA/TA assistantship requirements] What are the GA/TA assistantship requirement?

In our program, for your 20 hours of weekly GA/TA work, you will typically be assigned to two different faculty members (occasionally, all the hours will be with one person). These assignments involve helping faculty with grading, minor teaching admin and prep, and research.

Ph.D. students are required to only teach one course before they graduate, for their GA/TA work, and teaching is not allowed until a student has greatly progressed on his/her dissertation.

[STEM] Is the BIT Ph.D. program STEM Certified?

<u>Yes</u>. We are one of the few Ph.D. programs in North America that is both STEM-certified and housed in a leading business school! Thus, you can essentially get the best of both worlds: STEM and business.

Aside from providing a more marketable Ph.D. for both academia and industry, our STEM designation provides some further benefits, particularly to international students.

Formally, The STEM Designated Degree Program list is a complete list of fields of study that the US <u>Department of Homeland Security</u>) DHS considers to be science, technology, engineering or mathematics (STEM) fields of study **for purposes of the 24-month STEM optional practical training extension** described at 8 CFR 214.2(f). Under 8 CFR 214.2(f)(10)(ii)(C)(2), a STEM field of study is a field of study "included in the Department of Education's Classification of Instructional Programs taxonomy.

Virginia Tech's BIT Ph.D. program is formally classified under "Business Information Technology" | "Management Science" with a CIP code of "52.1301" and is formally confirmed with the VT graduate school and graduate catalog listing. See the official DHS designated degree list by clicking here.