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Assistant Professor

Mathematics Department



#### Where is West Virginia University?

West Virginia University (WVU) is located in Morgantown, West Virginia, U.S.A.







- Morgantown is located about 70 miles south of Pittsburgh, PA.
- It is close to Washington D.C., Cleveland, and New York City is only a road trip away.

# WVU SYSTEM

WVU system enrollment is 31,442.

West Virginia University is a family of distinctive campuses to provide a quality education:

#### MORGANTOWN

- 28,409 students
- 360+ majors

#### • BECKLEY WVU Tech.

- 1,623 students

- 40+ majors WestVirginiaUniversity.

# KEYSER WVU POTOMAC STATE COLLEGE

- 1,410 students
- 50+ majors
- CHARLESTON
  WVU HEALTH SCIENCES
- MARTINSBURG
  WVU HEALTH SCIENCES



#### WVU MORGANTOWN CAMPUS



West Virginia University (WVU) in Morgantown is the flagship higher education institution of the WVU System – and of the state.

WVU Morgantown is home to over 28,000 students.



WVU is one of only 115 institutions to receive the **R1 Research Status** designation out of the 4,500+ schools in the U.S.





We come from 108 countries and speak 100 languages on campus!



#### **WVU MORGANTOWN CAMPUS**







THE WORLD'S FIRST INSTITUTE DEVOTED TO THE STUDY OF **HUMAN MEMORY** IS ON OUR CAMPUS. THE FBI NAMED WVU ITS NATIONAL LEADER FOR **BIOMETRICS RESEARCH**. WE HOUSE THE NATION'S LARGEST FORENSIC SCIENCE AND CRIME SCENE TRAINING COMPLEX, AND ARE THE ONLY SCHOOL TO OFFER BACHELOR'S, MASTER'S AND DOCTORAL DEGREES IN FORENSIC SCIENCE.

WVU RANKED AMONG THE TOP 100 BEST UNDERGRADUATE ENGINEERING PROGRAMS IN THE COUNTRY BY THE U.S. NEWS AND WORLD REPORT. SINCE WE ARE ONE OF ONLY 115 TOP-RESEARCH UNIVERSITIES IN THE U.S., YOU CAN BE PART OF LIFE-CHANGING RESEARCH PROJECTS ALONGSIDE FACULTY EXPERTS – LIKE MORE THAN 2,000 OTHER UNDERGRADS SO FAR.



#### WVU MORGANTOWN: STAY SAFE & SOUND

- WVU is among the top 40 safest campuses in the U.S., according to the National Council for Home Safety and Security. And WVU and Morgantown received a "Safe Communities" accreditation from the National Safety Council.
- We have a 24-hour police department and an app, LiveSafe, that can anonymously connect you with authorities when you need it.



#### WEATHER in MORGANTOWN

In Morgantown, the summers are warm, humid, and partly cloudy and the winters are short, cold, and mostly cloudy. Over the course of the year, the temperature typically varies from -4°C to 29°C and is rarely below -13°C or above 33°C.

West Virginia University.



Ranked one of the safest in the state, best town for foodies, best city for summer internships, fastest growing city in West Virginia – all in one year -Morgantown is a fun city with big heart!

Guess what! There is even a wonderful traditional Japanese Restaurant in Morgantown: YAMA ^\_^









SHARING JAPANESE CULTURE AND LANGUAGE WITH THE WVU COMMUNITY.



Contact info: japaneseclubwvu@gmail.com

West Virginia University.



#### WEST VIRGINIA UNIVERSITY MATHEMATICS DEPARTMENT GRADUATE PROGRAM



#### **Graduate Programs at a Glance**





# Entrance Requirements for the M.S. Program

Areas of emphasis :

**Pure Mathematics & Applied Mathematics.** 

Regular admission requires a background equivalent to a standard U.S. undergraduate program in Mathematics, including introductory real analysis.



# M.S. Program



Provisional admission can be granted for most students from science or engineering backgrounds, with deficiencies remedied in the first year.



M.S. Program requires 30-33 credits (about 10-11 suitable courses).



Obtaining the M.S. degree takes typically requires 1-2 years of study from when students enter the program.





#### Entrance Requirements for the Ph.D. Program

- Regular admission requires a background equivalent to an M.S. degree in Mathematics.
- While students typically take additional credits, the basic program requires 24 credits of course work, with a major area of four courses, and two minor areas of two courses each.
- There are also additional seminar and research credits required.





## Ph.D. Program

- Students without an M.S. degree but with the equivalent of a traditional first year graduate education in Mathematics can sometimes be admitted as provisional Ph.D. students, with additional requirements of 12-18 credits of graduate course work.
- Students may specialize in any area represented among research-active faculty.
- Obtaining the Ph.D. typically requires 4-5 years of study from when students enter the program.





#### **Research Areas at WVU Math**

WVU Math Department currently has 25 permanent faculty members.

| Algebra   | Applied<br>Mathematics   | Discrete<br>Mathematics<br>(Graph Theory,<br>Combinatorics) |  |
|---|--------------------------|---|--|
| Ordinary and<br>Partial Differential<br>Equations | Mathematics<br>Education | Set Theory  |  |



#### Some of the graduate courses

- Modern Algebra
- Linear Algebra
- Commutative Algebra
- Homological Algebra
- Real Analysis
- Topology
- Graph Theory
- Numerical Analysis

- Number Theory
- Intro Dynamical Systems
- Set Theory
- Partial Differential Equations
- Mathematics Modelling
- Advanced Calculus
- Complex Variables

etc.



#### **Graduate Exams**

M.S. students in the Pure Mathematics area of emphasis, and all Ph.D. students, must pass exams in two subject areas from **Real Analysis**, **Algebra**, **Topology**, **Differential Equations**.

M.S. and Ph.D. students are subject to different timetables and grading standards for passing.

Ph.D. students must pass these exams no later than the spring of their second year in the program.

Upon completing their course work and identifying a clear research, Ph.D. students take a qualifying exam that marks the transition to candidacy for the Ph.D. degree.



#### M.S. and Ph.D. Programs

- The Master of Science degree programs are designed either for students who intend to go on to pursue a PhD in Mathematics, or for those planning to seek employment in education, government or industry.
- In the doctoral program, all students must first demonstrate that they are prepared to undertake doctoral-level course work by passing an entrance examination by the end of the first year in the program.





## Graduate Student Profile

West Virginia University.

 There are about 50 full time graduate students approximately evenly divided between M.S. and Ph.D. programs.

 The diverse student body presents many opportunities for personal interactions and the interchange of ideas across different cultures and nationalities.



Additional Requirements for International Students

- International students must meet the English requirement in order to be admitted.
- This can be met with a score of 79 on the computer-administered TOEFL exam (550 on the paper version) or a score of 6.5 on the IELTS exam.
- GRE is not required for either degree program. The subject GRE is useful to submit but it is optional.

#### **Cost of the Study at WVU**

- According to our <u>graduate admissions</u> site, current tuition & fees for international students is \$25,632.
- It is possible for someone to come to do research for a short period of time at WVU. However, they would need to work with the appropriate academic department on the possibility of getting financially sponsored and getting an appropriate visa.



## Intensive English Program (IEP)

- There is an Intensive English Program (IEP) at WVU.
- Courses offered: reading, vocabulary, writing/study skills, grammar, communication skills, American culture, TOEFL preparation.
- Application Deadlines and more info can be found at <u>https://intensiveenglishprogram.wvu.edu</u>



## Intensive English Program (IEP)

| Dates                              | Tuition and Fees | Estimated Cost of<br>Room / Meals | Health Insurance | Total  | Weeks in Sessions* |
|------------------------------------|------------------|-----------------------------------|------------------|--------|--------------------|
| Spring 2019 Jan. 7<br>- May 3      | <b>7</b> 6,144   | 5,142                             | 1,000            | 12,286 | 16                 |
| Summer I 2019<br>May 13 - June 21  | 2,080            | 2,571                             | 500              | 5,151  | 6                  |
| Summer II 2019<br>June 24 - Aug. 2 | 2,080            | 2,571                             | 500              | 5,151  | 6                  |
| Fall 2019<br>Aug. 21 - Dec. 13     | 6,444            | 6,464                             | 1,000            | 13,908 | 16                 |

\* **IMPORTANT NOTE**: The amounts listed above have been compiled to convey likely expenses.

These amounts are subject to change.



#### **Financial Aid**

- The Department has funding for 25-30 Graduate Teaching Assistants (GTA's). Currently the stipends are \$14,000 at the M.S. level and \$18,500 at the Ph.D. level for nine-month academic year.
- These assistanships include a full waiver of university tuition, as well as the student health insurance plan. College tuition and university fees, currently about \$850 each semester and they must be paid by all graduate students.
- Several research assistantships, supported by external grants, are also usually available.
- There are also a limited number of partial waivers of university tuition available for those who are not supported as graduate assistants.

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#### **More on Financial Aid**

- Summer support is often available in the form of teaching, assisting in the computer laboratory, or, for advanced Ph.D. students, summer research fellowships.
- Graduate teaching assistants (GTA's) work under the supervision of the Department's Institute for Mathematics Learning (IML). They participate in a year-long teaching seminar and usually begin by assisting students in the IML's instructional computer laboratory.
- GTA's are responsible for up to 20 hours per week of service, which may include teaching one's own sections in the calculus sequence or in college algebra.
- Typically 5-10 new GTA's will be awarded each year.



#### **How to Apply**

- WVU provides an online portal for submitting applications and transcripts, requesting online recommendations, and submitting supporting documents. This is available through the WVU graduate office website at <u>http://graduate.wvu.edu</u>.
- If you are applying, this is the most convenient approach and the preferred option.
- For full consideration, applications with supporting documents should be received by February 15 for financial aid in the subsequent Fall semester.



# **How to Apply**

- The following supplementary materials are recommended in submitting your application:
- The <u>Department's assistantship application form as pdf</u> or as <u>a word</u> <u>document (Word 97-2003)</u> if you are applying for financial aid.
- Note that letters of recommendation requested on the form will be automatically solicited for students applying through the graduate.wvu.edu application portal.
- Potential for success in graduate study is often hard to judge on the basis of an undergraduate academic record alone, so we invite any additional information that might reflect on your likelihood for success in the graduate program. This is less of an issue in the case of students who have already demonstrated their ability to do graduate level mathematics through course work, publications, or through obtaining an M.S. degree.

West Virginia University.

#### **More Information**

- Further information can be obtained at the Department's main website <u>http://www.math.wvu.edu</u> and for prospective graduate students <u>http://math.wvu.edu/prospective\_graduate</u>.
- The WVU graduate admissions website, from which applications can be submitted, is at: https://graduateadmissions.wvu.edu/home.
- Prospective students may also contact the Graduate Director at gradprog@math.wvu.edu.



#### Hope to see you in Morgantown! If you want more info, I have some brochures, flyers with me! Don't hesitate to ask after my talk.







#### Thank You! どうもありがとうございます

Please feel free to contact me at:

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