Naveen Jindal School of Management

The Naveen Jindal School of Management (JSOM) offers a range of degree options and program formats designed to serve the diverse needs of a student population primarily composed of working adults, but that also includes traditional full-time graduate students and, more recently, residential undergraduate students.

Graduate programs stress the theory and use of applied sciences for successful management and administration of private and public institutions. Courses provide an opportunity to gain integrated and detailed knowledge of the functional areas of management as well as analytical tools for effective appraisal and decision-making. Seminars and research on specific projects are designed to develop creativity and to stimulate the student toward an integrated application of acquired knowledge.

The Naveen Jindal School of Management's mission is to meet the challenges of a rapidly changing, technology-driven, global society by partnering with the business community to:

- deliver high quality management education to a diverse group of undergraduate and graduate students and practicing executives;
- develop and continuously improve programs advancing management education and practice; and,
- conduct world-class research enhancing cutting-edge management knowledge.

Degrees Offered

- Master of Business Administration (53 semester credit hours minimum)
- Master of Science in Accounting (36 semester credit hours minimum)
- Master of Science in Business Analytics (STEM) (36 semester credit hours minimum)
- Master of Science in Energy Management (STEM) (36 semester credit hours minimum)
- Master of Science in Finance (36 semester credit hours minimum)
- Master of Science in Financial Engineering and Risk Management (STEM) (36 semester credit hours minimum)
- Master of Science in Healthcare Leadership and Management (36 semester credit hours minimum)
- Master of Science in Information Technology and Management (STEM) (36 semester credit hours minimum)
- Master of Science in Innovation and Entrepreneurship (36 semester credit hours minimum)
- Master of Science in International Management Studies (36 semester credit hours minimum)
- Master of Science in Management Science (STEM) (36 semester credit hours minimum)
- Master of Science in Marketing (36 semester credit hours minimum)
- Master of Science in Supply Chain Management (STEM) (36 semester credit hours minimum)
- Master of Science in Systems Engineering and Management (STEM) (36 semester credit hours minimum)
• **Doctor of Philosophy in International Management Studies** (75 semester credit hours minimum beyond the baccalaureate degree)

• **Doctor of Philosophy in Management Science (STEM)** (75 semester credit hours minimum beyond the baccalaureate degree)

• **Executive Education Programs**

## Certificates Offered

- **Graduate Certificate in Business Intelligence and Data Mining** (12 semester credit hours minimum)
- **Graduate Certificate in Corporate Innovation** (9 semester credit hours minimum)
- **Graduate Certificate in Cybersecurity Systems** (12 semester credit hours minimum)
- **Graduate Certificate in Enterprise Systems** (9 semester credit hours minimum)
- **Graduate Certificate in Executive and Professional Coaching** (15 semester credit hours minimum)
- **Graduate Certificate in Healthcare Information Technology** (9 semester credit hours minimum)
- **Graduate Certificate in Lean Six Sigma (Yellow/Green) in Healthcare Quality** (12 semester credit hours minimum)
- **Graduate Certificate in New Venture Entrepreneurship** (9 semester credit hours minimum)
- **Graduate Certificate in Product Lifecycle and Supply Chain Management** (15 semester credit hours minimum)
- **Graduate Certificate in Project Management** (20 semester credit hours minimum)
- **Graduate Certificate in Research Foundations in Accounting** (15 semester credit hours minimum)
- **Graduate Certificate in Systems Engineering** (12 semester credit hours minimum)
- **Graduate Certificate in Systems Management** (12 semester credit hours minimum)

## Faculty


**Associate Professors:** Nina Baranchuk, Norris Bruce, Jianqing Chen, Zhonglan Dai, Rebecca Files, Xianjun Geng, J. Richard Harrison, Ernan E. Haruvy, Dorothee Honhon, Kyle Hyndman, Surya N. Janakiraman, Robert L. Kieschnick Jr., Seung-Hyun Lee, Ningzhong Li, Livia Markoczy, Amit Mehra, Toyah Miller, Alp Muharremoglu, Ramachandran (Ram) Natarajan, Valery Polkovnichenko, Ashutosh Prasad, Orlando C. Richard, Young U. Ryu, Gil Sadka, Jane Salk, Harpreet Singh, David J. Springate, Upender Subramanian, Kelsey D. Wei, Han (Victor) Xia, Jun Xia, Ying Xie, Yexiao Xu, Alejandro Zentner, Jieying Zhang, Yuan Zhang, Feng Zhao, Zhiqiang (Eric) Zheng, Yibin Zhou

Assistant Professors: Mehmet Ayvaci, Emily Choi, Bernhard Ganglmair, Nathan Goldman, Dorothée Honhon, Kyle Hyndman, Atanu Lahiri, Sheen Levine, Bin Li, Jun Li, Meng Li, Xiaolin Li, Naim Bugra Ozel, Arzu Ozoguz, Anany Qi, Alejandro Rivera Mesias, Alessio Saretto, Serdar Simsek, Gonca P. Soysal, Shaojie Tang, Christian Von-Drathen, Shouqiang Wang, Malcolm Wardlaw, Steven Xiao, Shengqi Ye, Nir Yehuda, Zhe (James) Zhang, Xiaofei Zhao


Clinical Associate Professors: Shawn Alborz, Larry Chasteen, Sonia Leach, David Parks, Kannan Ramanathan, Carolyn Reichert, Avanti P. Sethi, Kelly Slaughter, James Szt, Mark Thouin, McClain Watson

Clinical Assistant Professors: Shawn Alborz, Athena Alimirzaei, Moran Bluestein, Judd Bradbury, John Gamino, Ayfer Gurun, Maria Hasenhuttl, Julie Haworth, Jeffery (Jeff) Hicks, Revansiddha Khanapure, Kristen Lawson, Vance Lewis, Liping Ma, Ravi Narayan, Dawn Owens, Parneet Pahwa, Drew Peabody, Anastasia V. Shcherbakova, Jeanne Sluder, Nassim Sohaee, Russell Torres, jdb101000.jpg140630

Visiting Assistant Professors: Lale Guler, Ying (Amy) Quan


Professor Emeritus: Dale Osborne

Objectives

The Master of Business Administration (MBA) degree program provides students with a broad managerial education drawing from all business disciplines. The Jindal School of Management offers several approaches to obtaining an MBA degree.

- the Cohort MBA program, a full-time program in which students are admitted as a group each fall and take their required classes together in a fixed sequence,
- the Professional MBA Flex program for students attending school part-time, with classes largely meeting in the evening,
- the Professional MBA Evening Cohort program in which students are admitted as a group each fall and take their required classes together in a fixed sequence,
- the Professional MBA Online program with all core and elective courses available online,
- the Executive MBA and Global Leadership MBA programs in which applicants should have eight or
more years of professional experience and are admitted as a cohort each fall,
• the specialty Executive MBA programs with emphasis in coaching, medical management for physicians, product lifecycle and supply chain management, and project management with unique admissions requirements and delivery formats.

The **MS in Accounting** (MS ACCT) degree program enables students to tailor their degree in preparation for specific career goals by selecting electives from various fields, including corporate accounting, assurance services, taxation services, internal audit, and governmental accounting. Upon completion of the MS in Accounting, students may be eligible to sit for the Uniform CPA examination, provided they meet the educational requirements stipulated by each state's board of public accountancy. The Jindal School of Management offers two options to obtaining MS ACCT degree.

(1) The Flex program in which admits students in Fall, Spring, and Summer semesters.

(2) The Cohort program in which students are admitted only in Fall semester. Special tuition, fees and admissions requirements apply and the program is supported entirely by participant tuition/fees.

The **MS in Business Analytics** (MS BUAN) is a STEM (Science, Technology, Engineering and Mathematics) degree program that addresses the collection, management and analysis of data using information technology tools and sophisticated mathematical models that can provide deep business insights for formulating and implementing business strategies. The program trains students to use analytic models and tools to identify opportunities as well as problems within business operations in order to gain a competitive edge in the global economy. The program also ensures that students acquire fundamental knowledge of business analytics and its applications and hands-on experiences gained through projects in partnership with companies.

The **MS in Energy Management** (MS EM) is a STEM (Science, Technology, Engineering and Mathematics) degree program that trains students in the fundamentals of global energy markets and provide them with skills necessary to make managerial decisions faced by diverse energy companies. The curriculum addresses concepts related to economics, finance, business strategy, risk management, public policy, technology and energy supply chain with the objective of identifying challenges and opportunities. The degree program requires students to complete 9 semester credit hours of business core courses, 15 semester credit hours in energy core courses, and 12 semester credit hours of electives that can be tailored to reflect a particular interest in a specific area of the energy industry, such as risk management, logistics and supply chain, finance, and contracting and negotiations.

The **MS in Finance** (MS FIN) is designed for students either with or without previous educational background in finance. Most MS Finance students select the Financial Management option, which provides a generalist approach to the degree while allowing maximum flexibility to design a program tailored to their needs. Students can also choose one of the six concentrations: Corporate Finance/Investment Banking, Financial Analyst (CFA), Financial Risk Management, Energy Risk Management, Enterprise Risk Management, and Real Estate Finance. Jindal School of Management offers two options to obtaining MS FIN degree.

(1) The Flex program allows students the flexibility to complete the program at their own pace, choose courses and gain knowledge to pursue opportunities in financial analysis, corporate finance/investment banking, financial risk management, energy risk management, enterprise risk management and real estate. Admission to the program occurs in Fall, Spring and Summer semesters.

(2) The Cohort program is a one-year program in which students take all courses together as a cohort. It
is designed for students from various backgrounds to gain knowledge to pursue opportunities in finance. The program is a lock-step program with no flexibility for choosing electives. Admission to the program occurs only in the Fall semester. Special tuition, fees and admissions requirements apply and the program is supported entirely by participant tuition/fees.

The **MS in Financial Engineering and Risk Management** is a STEM (Science, Technology, Engineering and Mathematics) and cohort degree program that prepares students to learn the quantitative skills required to analyze financial information, engineer financial products, identify risks, and manage risks. The program is designed for students with or without previous educational background in finance, but with a proclivity toward more quantitative approaches to managerial issues. Special tuition, fees and admissions requirements apply and the program is supported entirely by participant tuition/fees.

The **MS in Healthcare Leadership and Management** (MS HMGT) prepares students for roles in the leadership and management of the U.S. healthcare industry by building a foundation in advanced business management theory and practice with an understanding of the structure, operation, and financing of the U.S. healthcare system. There are three separate programs available:

1. The Master of Science in Healthcare Leadership degree program is for healthcare administrators and those desiring a management career in this field. Classes are offered on a semester-long basis in the evenings to accommodate students with full time jobs. Core business classes are also offered online (admission may be in fall, spring or summer semesters),

2. The Executive Master of Science in Healthcare Leadership and Management is exclusively for licensed physicians and is delivered in an executive format, consisting of nine four-day residential classes. A different class is offered every two months and classes may be started at any time and taken in any order,

3. The Executive Master of Science in Healthcare Leadership and Management for Healthcare Professionals is designed specifically for healthcare professionals who are seeking additional education to help boost their careers and lead the significant changes in healthcare. This Executive program is geared to accommodate the busy schedules of working professionals, with classes meeting two days a month on a Friday and Saturday. The curriculum is designed to complement existing professional development programs along the entire continuum of care.

The executive curriculum is jointly taught by faculty from the UT Dallas Naveen Jindal School of Management, The University of Texas Southwestern Medical Center and a select group of experienced healthcare executives and physician leaders who bring a special experience and expertise to the program.

The **MS in Information Technology and Management** (MS ITM) is a STEM (Science, Technology, Engineering and Mathematics) degree program that prepares students to apply information technology to business problems and create efficient and effective solutions. The MS ITM is available as an on-campus or an online degree program and students may choose approved electives that maximize their individual educational and professional goals. The program also offers opportunities for students to concentrate in specific tracks such as Business Intelligence and Analytics, Cybersecurity Management, Enterprise Systems, Healthcare Systems, and IT Consulting and Services Management, depending on their interests and goals.

The **MS in Innovation and Entrepreneurship** (MS IE) prepares students for successful business careers in entrepreneurial new ventures, entrepreneurial finance (venture capital/private equity), or innovation-
related roles in mature organizations (product planning, product marketing, product development, and more). The program offers two options: the Innovation within the Corporation concentration and the New Venture concentration, which includes the Startup Launch specialty as a separate option. The program complements baccalaureate or advanced degrees in management, scientific or engineering disciplines, and is valued by employers in technology or consumer products industries. The program provides a solid foundation in the management disciplines essential to innovation, with specific focus on the tools, techniques and skills required to develop and lead product, service and business-model innovation.

The **MS in International Management Studies** (MS IMS) degree program provides relevant knowledge and training in international management, which includes trade across national boundaries, management practices within multinational firms and international organizations. The program provides students the opportunity to learn the (1) functional areas of management, (2) international management practices and strategies, and (3) cultural, sociopolitical and geographical constraints affecting international business decisions. The program also provides students with opportunity to learn international business environments through international study trips in various regions of the world. Many of the courses for this degree can also be taken online.

The **MS in Management Science** (MS MSc) is a STEM (Science, Technology, Engineering and Mathematics) degree program that is highly flexible and customizable and provides students the opportunity for specialized education in a specific management discipline by designing a program of study that fits their specific needs. Students choose their own course of study, selecting a variety of elective courses and concentrations to gain an in-depth knowledge of a specific business area. The MS MSc is available as an on-campus or an online degree program.

The **MS in Marketing** (MS MKT) program prepares students seeking higher level positions in marketing and/or pursuing a graduate program to further advance their marketing knowledge. The MS in Marketing program offers five specialized tracks: advertising and branding, digital advertising and marketing, marketing analytics and insights, product management, and a general track of marketing management track. The program emphasizes both theoretical and hands-on experience through real-world company projects and competitions.

The **MS in Supply Chain Management** (MS SCM) is a STEM (Science, Technology, Engineering and Mathematics) degree program that explores the key issues associated with the design and management of industrial supply chains, sourcing, production and logistics and provides students with advanced knowledge on how to identify, resolve, and manage such complex operational problems. The program also analyzes current supply chain operating practices, technology, applications and strategy developments. Students acquire not only the crucial knowledge of business management but also analytical decision-making skills along with real-life experiences gained through industry projects with area companies. The MS SCM is available as an on-campus or an online degree program and offer four specialized tracks: Analytics, Retail, Risk, and Strategy.

The **MS in Systems Engineering and Management** (MS SEM) is a STEM (Science, Technology, Engineering and Mathematics) degree program that focuses on (a) educating industry sponsored, as well as corporate employees and students with three or more years of professional experience in the executive format of the program and (b) regular full-time in the traditional format of the program in both technical and human-centered courses, and, more specifically, in the disciplines of systems engineering, systems management, entrepreneurship and intrapreneurship, technology and new-product development, and strategic business management. The curriculum provides students with knowledge and skills to design,
develop and manage complex projects requiring wide-ranging scientific and business competencies. The typical SEM student is a high performer with at least a bachelor's degree in engineering, math, physics, chemistry, economics or finance. Target industries for the program include: aerospace and defense, business and data analytics, control and mechatronics, cybersecurity and information assurance, energy and infrastructure, enterprise and data management, entrepreneurship and innovation management, global supply chain and operations management, healthcare systems, optimization theory and operations research, telecom, IT and multimedia networks, and transportation.

**Combined/Joint Degree Programs**

The **MD/MBA program** is a joint effort of the school of medicine at UT Southwestern Medical Center and the Naveen Jindal School of Management. Students usually complete the first three years of the medical curriculum (all basic science courses and third-year clinical rotations) and then take a one-year leave of absence from the medical school to complete the business curriculum. Students then return to the medical school for completion of the medial curriculum in the required fourth-year clinical clerkships and electives. At the end of the five years, the medical degree will be awarded by UT Southwestern and the MBA by UT Dallas.

Leaders in high-tech firms often need expertise in both engineering and management. Through a unique combined master's degree program, graduate students may earn an **MS EE** degree from the Jonsson School of Engineering and Computer Science in combination with an **MBA**, or an **MS** degree from the Naveen Jindal School of Management. This combined degree program is ideal for students interested in managing new technologies, from conceptualization and development to introduction and production. Students must meet the admission requirements in both schools and have an advisor in both schools. The combination of MS EE and MBA degrees can be earned by completing a minimum of 68 graduate semester credit hours, compared to 86 semester credit hours if completing the two degrees separately. The combination of MS EE and MS degrees can be earned by completing a minimum of 51 semester credit hours beyond prerequisites, compared to 69 semester credit hours if completing the two degrees separately.

The joint Executive **MS SEM/MBA** degree program at the Naveen Jindal School of Management and the Erik Jonsson School of Engineering and Computer Science provides both deep knowledge in SEM and all areas of management with an enhanced worldwide perspective of business leadership for increasing productivity, efficiency and profitability. The program is suitable for experienced graduate students seasoned by three or more years as workforce professionals who seek a more comprehensive education in technical skills as well as broad-based business-leadership capabilities for the global economy. A joint MS SEM/MBA degree is also available to regular full-time students in the traditional format of the program. In the joint program, students can earn both degrees with a minimum of 63 semester credit hours.

**PhD Programs**

The **PhD in International Management Studies** provides the opportunity to conduct research in the analysis of international business, emphasizing a strong foundation in theory and research in organizations and strategy. International Management Studies focuses on the analysis of organizations, industries and markets as interdependent systems, stressing structural, strategic, environmental, and international considerations and their implications for management. Topics such as corporate strategy, international business, multinational management, organization design and change, technological and industrial development, and managerial decision-making are examined using management theories and
empirical methods.

The PhD in Management Science provides the opportunity to conduct research in a functional business area to contribute to the knowledge in that field with respect to its intellectual content or professional practice. The Naveen Jindal School of Management defines Management Science as the use of economics, behavioral science, mathematics and statistics to conduct rigorous scientific research. It encompasses both theory and empirical analysis. Management Science embraces areas of specialization such as accounting, finance, information systems, marketing and operations management. It has no clear boundaries among the various areas, places emphasis on science, and is not constrained by the culture of individual disciplines. It is the underlying orientation of science and integration that distinguishes Management Science from other philosophies and approaches to the study of management.

Both doctoral programs offer preparation for academic and/or research positions in universities, with organizations such as the World Bank, and in industry, both in the United States and in other countries.

Executive Education Programs

The Naveen Jindal School of Management also offers Executive Education degree programs. Executive Education MBA programs are offered for students with eight years of experience. These include (1) the Executive MBA program with classes meeting four days a month (Friday and Saturday every other weekend), (2) the Global Leadership Executive MBA is a hybrid program with both classroom and distance learning with a focus on exploring geographic regions, entering in new geographic markets and leading and executing in those markets, (3) the Executive MBA with emphasis in project management that highlights managing complex projects, (4) the Executive MBA with concentration in Product Lifecycle and Supply Chain Management, and (5) the Healthcare Leadership and Management Executive MBA for physicians interested in learning how to improve the leadership and management of their organizations. Students in Executive Education programs are assessed program-related fees beyond those charged to other graduate students to cover the additional costs of unique scheduling, events and services associated with these programs. Each of these programs requires a minimum 53 semester credit hours to graduate.

Facilities

The Naveen Jindal School of Management opened its 203,000 square-foot JSOM I building in Fall 2003. The three wings, arranged around a courtyard, provide classrooms, meeting rooms, office space and state-of-the-art wireless access to the Internet throughout the facility. JSOM II building, opened in December 2014 with an additional 108,000 square feet of space.

Admission Requirements to Master's Programs

Please visit the University's general admission criteria for the graduate programs. The following factors are considered in arriving at an admission decision:

- A bachelor's degree from an institution in the United States, or its equivalent (all majors are considered),
- International applicants must submit a TOEFL score of at least 80 on the Internet-based test that is less than two years old,
- Personal essay outlining academic interests and goals,
• All master's programs will require at least one letter of recommendation which can be either academic or professional. For the MBA programs, at least one letter must be professional,
• Resume, and
• Competitive GMAT (GRE also accepted) performance based on a score that is less than five years old.

Applications are due in the Admissions Office 90 days prior to registration for international students and 45 days prior to registration for all other students. Students are admitted three times per year and can start their studies during any one of the three semesters. Students may apply for the **Dean's Excellence Scholarship**, which provides financial support in the form of scholarships.

**Admission Requirements to Full-time (Cohort) MBA program:** In addition to the factors required for admission to the evening programs, admission to the Full-time, Cohort MBA program requires the capability to perform well in a fast-paced, team-oriented curriculum. Applicants are admitted based on a composite evaluation of the submitted measures of performance which include the GMAT, GPA, recommendation letter, and work experience, as well as initiative and interest suggested through essays. Students are admitted each fall.

**Admission Requirements to Executive MBA programs:** Admissions are based on academic transcripts, a personal essay, three letters of recommendation, professional growth and experience and the potential that they will bring to the cohort. Students must have eight years of business experience with relevant managerial or/and international experience. The GMAT is not required but each applicant will interview with the program director.

**Admission Requirements of the Executive Track Master of Science in Healthcare Leadership and Management** and the Healthcare Management Executive MBA are an MD or DO degree from an accredited School of Medicine or School of Osteopathy, a copy of a current unrestricted license to practice medicine in the U.S. and a Medical School transcript.

**Admission Requirements of the Executive Track Master of Science in Healthcare Leadership and Management for Healthcare Professionals** and the Healthcare Management MBA for Healthcare Professionals are a Bachelor’s degree from an accredited undergraduate school; letters of recommendation; statement of personal and educational objectives; professional certifications or licensure if applicable and a personal interview at the discretion of the program director.

**Admission Requirements to Master of Science in Systems Engineering and Management (SEM):** The **Executive MS SEM** is primarily for working professionals with at least three years of professional experience who can enroll only in cohort classes specially offered late on Fridays and on Saturdays. Typical students also have a bachelors degree in engineering, computer science, math, physics, chemistry, economics or finance. The **Traditional MS SEM** is primarily for full-time students who can enroll in regularly offered weekday and weekday evening classes. GRE or GMAT scores are required, and typical students have a bachelor's degree in engineering, computer science, math, physics, chemistry, economics or finance.

**Admission Requirements to Non-Degree Seeking Students:** Students may be admitted as non-degree seeking students. To be admitted as a non-degree seeking student, students will have to meet all the admission requirements specified for degree-seeking students including relevant test scores (GMAT/GRE, TOEFL). Students who want to switch to degree-seeking status, will have to apply to the degree program. If they are admitted, at most six credits taken as a non-degree seeking student can be transferred to the degree program.
Additional Master's Degrees

Students at the Naveen Jindal School of Management are encouraged to pursue additional master's degrees at The University of Texas at Dallas. To the extent that the requirements of some master's degrees overlap, some of the semester credit hours taken in pursuit of previously earned master's degrees at UT Dallas may be counted toward an additional master's degree. The only limitation is that more than one-half of the semester credit hours for any master's degree earned at UT Dallas must be satisfied by new coursework. A student is required to develop an approved plan of studies through the department or program offering the master's degree prior to enrolling in that degree. Similarly, a student wishing to earn two master's degrees concurrently must develop an approved plan of studies through both relevant departments and programs. All coursework for any degree must meet the academic standards of that degree.

Admissions Consideration for Applicants with Three-Year Undergraduate Degrees

Applicants with three-year undergraduate degrees will be considered for admission into our MS and MBA programs. Their candidacy will be reviewed holistically considering all of the following variables: Admission test scores, English proficiency scores if applicable, undergraduate grade point average, official transcripts from all previous institutions, undergraduate degree major and awarding institution, resume, recommendations and personal objective statement.

Substitutions and Transfers of Credit

Substitutions of program requirements may be granted in recognition of previous coursework taken in a specific business program area. Substitutions allow students to skip a core course and take the next higher level course in that area with no reduction in the overall program semester credit hour requirements. Transfers of credit may be granted for equivalent graduate coursework taken at other universities with a grade of "B" or better within the past six years. Substitutions must be approved by the program director and the area coordinator and the Dean of Graduate Studies. The total number of transfers of credit toward the completion of a master's degree cannot exceed nine semester credit hours toward the MS degree, and 12 semester credit hours toward the MBA degree. Applications for approval of substitutions and transfers of credit may be obtained in and submitted to the Naveen Jindal School of Management Advising Office.

Prerequisites for Graduate Programs

Students pursuing graduate programs require to complete one semester credit hour of Professional Development course (except MS Accounting, MS Accounting Cohort, MS Finance Cohort, MS Financial Engineering and Risk Management and MBA programs). In addition, knowledge of calculus is a requirement for certain programs (see individual degree programs for details). Students who have not completed an undergraduate calculus course may satisfy the prerequisite by completing OPRE 6303 Quantitative Foundations in Business with a grade of "B" or better. Degree credit is not earned for program prerequisites, however, the grade achieved in OPRE 6303 will count toward the student's grade-point average (GPA). Prerequisites must be satisfied within the first 12 semester credit hours of graduate study as a degree-seeking student.