# Finance and Real Estate - Graduate Programs

## Master of Science in Quantitative Finance

The Master of Science in Quantitative Finance degree program is a STEM program designed to meet the growing demand for financial professionals equipped to implement state-of-the-art analytical techniques in support of financial decision-making. Students complete a rigorous eight-course sequence that includes: finance theory, mathematical finance, financial modeling, economic theory, and econometrics. Students then complete a four-course elective program designed jointly by the student and the program advisor. The Master of Science in Quantitative Finance degree program is a specialized degree program designed to build upon the candidate's prior background.

## Master of Science in Real Estate

The purpose of the Master of Science in Real Estate degree program is to provide students an opportunity to obtain a better understanding of the mechanics of real estate decision making in modern society and a greater depth of training in the discipline of real estate decision making than is possible at the baccalaureate level. The specific objectives of the program are to prepare students for careers in business, government, research, and teaching and for further graduate study. In this program, students are exposed to the theory, research, and practical applications of numerous real estate content areas, including investment analysis, appraisal, real estate development, primary and secondary mortgage markets, and mortgage backed securities. The Master of Science in Real Estate degree program is a specialized degree program designed to build upon the candidate's background.

## Accreditation

Both programs are accredited by AACSB-International.

## Admission - Master of Science in Quantitative Finance

Admission to the M.S. in Quantitative Finance (MSQF) program is based upon the completion of the general graduate admission requirements of the University. For admission into the MSQF program, an acceptable score in the Graduate Management Admission Test (GMAT) or Graduate Record Examination (GRE) and acceptable undergraduate performance are required. The GMAT is strongly preferred. Preference is given to individuals having extensive mathematics or computer science backgrounds. Students whose native language is not English must also take the Test of English as a Foreign Language (TOEFL), TOEFL iBT, Test of Spoken English (TSE) or International English Language Testing System (IELTS). International applicants scoring below acceptable levels on verbal portions of entrance examinations may be admitted conditional upon passing an English proficiency exam or upon completing the University's Graduate English Skills Program prior to beginning graduate coursework. The GMAT or GRE score shall not be used as the sole criterion for for admitting applicants or the primary criterion for denying an applicant's admission into the MSQF program. Specifically, multiple criteria are used to make admission decisions. Unconditional acceptance is based on consideration of all the information listed below, and the decision to deny admission is not based on any single criterion.

Applicants are encouraged to submit with their application a resume that highlights professional and personal accomplishments, linguistic abilities, computer expertise and leadership experience.

Along with the grade point average and GMAT or GRE scores, admission criteria include the following:

1. An undergraduate GPA of at least 3.0 on a 4.0 scale as calculated by Graduate Admissions. The grade point average is calculated on your undergraduate degree using approximately the last 60 hours. A graduate grade point average is used along with GMAT scores when it is a 3.0 or above and based on at least 24 hours.
2. GMAT or GRE sub-scores (verbal and quantitative) are also considered in the admission decision. A typical successful candidate will score at or above the 75th percentile on the quantitative portion, and at or above the 40th percentile on the verbal portion of either exam.
3. International Applicants must submit a  score of at least 550 on the paper-based TOEFL, a score of at least 213 on the computer based TOEFL, a minimum score of 6.5 on the IELTS, or a minimum TOEFL iBT total score of 79 with sectional scores that meet or exceed 22 for the writing section, 21 for the speaking section, 20 for the reading section, and 16 for the listening section to meet this requirement.
4. Grades in specified undergraduate business and non-business courses (math, accounting, economics, statistics, for example)
5.  Mathematics coursework ).
6. General and specific program accreditation status of degree-granting institution.
7. Professional work experience.
8. Professional certification or licensure.

### Unconditional Admission

For unconditional admission, items 1 through 5 above should indicate strongly the potential for successful academic performance at the master's level. Students who are unconditionally admitted, have a minimum undergraduate grade point average of 3.0 as calculated by Graduate Admissions (or 3.0 at the graduate level), and enroll for a minimum of six semester credit hours will be eligible for available fellowship and/or scholarship support. A standardized test score (GMAT or GRE) will not be used as the sole criterion or the primary criterion for determining fellowship and/or scholarship eligibility.

## Probationary Admission

An applicant deemed deficient in one or more of the above criteria may be considered for probationary admission upon careful review of his/her materials. Probationary admission requires the student to maintain a 3.00 grade point average for the first two semesters of enrollment.  Additionally, the student may be required to take deficiency courses.

## Provisional, Deferred and Denied Admission

Provisional admission may be granted if an applicant is unable to supply all required documentation prior to the admission deadline but who otherwise appears to meet admission requirements. A deferred decision may be granted when a file is incomplete or when denial is inappropriate.

An applicant will likely be denied admission when three or more of items one through six above indicate lack of potential for success in the program. All applicant data will be evaluated carefully before a denial is issued.

# Degree Requirements

The M.S. in Quantitative Finance is designed to provide a specialized, highly analytical graduate education to financial managers, financial analysts, and technical personnel. The program consists of 36 credit hours of coursework in finance, economics, mathematics, statistics, and computer science. All students will complete a twenty-four-hour set of foundation classes consisting of:

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|---|---|---|
| FINA 5323 | INVESTMENTS | 3 |
| FINA 5327 | FINANCIAL DERIVATIVES | 3 |
| FINA 5350 | MATHEMATICAL FINANCE | 3 |
| FINA 5351 | FINANCIAL MODELING FOR INVESTMENTS | 3 |
| FINA 5352 | FINANCIAL MODELING FOR CORPORATE ANALYSIS | 3 |
| FINA 5376 | FINANCIAL DATA ANALYTICS | 3 |
| ECON 5336 | APPLIED BUSINESS AND ECONOMICS DATA ANALYSIS I | 3 |
| INSY 5336 | PYTHON PROGRAMMING | 3 |
| **Total Hours** | | **24** |

 The remaining twelve-hours of coursework are selected by the student, subject to the approval of the program advisor. Courses will be chosen from a list that includes:

1. finance elective classes (international finance, financial institutions, capital markets, real options, and capital budgeting),
2. economics (macroeconomic theory, econometrics, time series analysis),
3. mathematics (advanced calculus, real analysis, differential equations, stochastic processes, and numerical methods),
4. statistics (probability theory, mathematical statistics), and
5. computer science (programming languages, numerical methods, parallel processing, software engineering).

Students who do not have the appropriate background may have to take additional foundation coursework. Quantitative background appropriate to begin the MSQF program consists of a minimum of 6 credit hours of calculus and 3 credit hours each in linear algebra, statistics, and computer programming. Other foundation coursework would include at least 3 credit hours each of microeconomics and finance.

# Master of Science in Real Estate

## Admission - Master of Science in Real Estate

Along with the grade point average and GMAT or GRE scores, admission criteria include the following:

1. An undergraduate grade point average (GPA) of 3.0 on a 4.0 scale, as calculated by Graduate Admissions, is typical of a successful candidate. This will be integrated into a formula or index that multiplies the GPA by 200 and adds the resulting value to the GMAT Score. An index score greater than 1070 or higher is typical of a successful candidate.
2. GMAT sub scores (verbal and quantitative) are also considered in the admission decision. GMAT sub scores greater than the 30th percentiles are typical of a successful candidate.
3. A GRE quantitative percentile greater than the 30th percentile and Verbal percentile greater than the 30th percentile is typical of a successful applicant.
4. International applicants must submit a score of at least 550 on the paper-based TOEFL, a score of at least 213 on the computer-based TOEFL, a minimum score of 40 on the TSE, a minimum score of 6.5 on the IELTS, or a minimum TOEFL iBT total score of 79 with sectional scores that meet or exceed 22 for the writing section, 21 for the speaking section, 20 for the reading section, and 16 for the listening section to meet this requirement.
5. Grades in specified undergraduate business and non-business courses (math, accounting, economics, statistics, for example)
6. Educational objectives and quality of written expression of the 200 word application essay.

7. Letters (2 are required) of recommendation from two persons familiar with the applicant's academic background and/or work experience who can assess the applicant's potential success in graduate school.
8. General and specific program accreditation status of degree-granting institution.
9. Professional work experience.
10. Professional certification or licensure.

## Unconditional Admission

For unconditional admission, the applicant's composite total form the index must be 1070 or higher and items 1 through 5 above should strongly indicate potential for successful academic performance as a graduate real estate student.

Students who are unconditionally admitted, have a minimum undergraduate grade point average of 3.0 as calculated by  Graduate Admissions (or 3.0 at the graduate level), and enroll for a minimum of six semester credit hours will be eligible for available fellowship and/or scholarship support. A standardized test score (GMAT) will not be used as the primary criterion for determining fellowship and/or scholarship eligibility.

## Probationary Admission

For an applicant with an index score below 1070, probationary admission may be available if items 1-10 indicate a potential for successful academic performance as a graduate real estate student. Probationary admission requires the student to maintain a 3.00 grade point average for the first two semesters of enrollment. Additionally, the student may be required to take deficiency courses.

## Provisional, Deferred and Denied Admission

A provisional decision to admit may be granted when the applicant meets criteria for unconditional or probationary status but one or more applicant credentials are incomplete. A deferred decision may be made when an applicant's file is not sufficiently complete to make a final admission decision.

For an applicant with an index score less than 1000 and if items 1-10 do not indicate a potential for successful academic performance as a graduate real estate student admission will likely be denied. All applicant data will be carefully reviewed before an admission denial is made.

## Waiver of GMAT Score for Graduate Certificate in Real Estate Development Students

Students who successfully complete the Graduate Certificate in Real Estate Development with a GPA of 3.5 or higher will, upon the recommendation of the Real Estate Admissions Committee and approval of the Dean of Business, be granted a waiver of the GMAT requirement for their application to the Master of Science in Real Estate program.

## Degree Requirements

The program, which can be completed by part-time students who attend classes during the late afternoon, and evening hours, is designed to accommodate students with divergent educational backgrounds and career interests. Each student's program of work must be approved by the Real Estate Graduate Advisor and it must contain a minimum of 15 semester hours in approved advanced graduate real estate courses taken at The University of Texas at Arlington.

A minimum of 36 semester hours is required. All classes must be approved by the Graduate Advisor in Real Estate. Students who do not have a bachelor's degree in business administration may have to take additional coursework (up to 3 semester hours) to acquire a sufficient general business foundation. Students may have foundation courses waived by the Graduate Advisor if they have completed equivalent courses.

| ECON 3310 | MICROECONOMICS ( (first completed at UTA)) | 3 |
| or ECON 3312 | MACROECONOMICS | |
| FINA 3313 | BUSINESS FINANCE | 3 |
| REAE 3325 | REAL ESTATE FUNDAMENTALS | 3 |
| BSTAT 3321 | INTERMEDIATE STATISTICS FOR BUSINESS ANALYTICS ( (first completed at UTA)) | 3 |
| or BSTAT 3322 | ADVANCED STATISTICS FOR BUSINESS ANALYTICS | |
| **Total Hours** | | **12** |

## Fast Track Program

The MS in Real Estate participates in the Fast Track program.  Students interested in this program should first contact their Undergraduate Advisor.

# Graduate Certificate in Real Estate Development

## Objective

In keeping with the mission of The University of Texas at Arlington to provide lifelong learning opportunities, the Department of Finance and Real Estate now offers a Graduate Certificate in Real Estate Development. The Graduate Certificate in Real Estate Development is designed to provide qualified real estate professionals advanced instruction in real estate development and allow them to further their professional development. This post-baccalaureate Certificate provides an educational opportunity that is narrower in scope, and shorter in duration, than graduate degree programs. It is

ideal for people transitioning from one sector of real estate into real estate development, or those in the process of satisfying education requirements for various professional real estate licenses.

## Admission

Admissions to the Graduate Certificate in Real Estate Development is based upon the general graduate  admission requirements of the University. Generally applicants must have an undergraduate grade point average of at least 2.9 as calculated by Graduate Admissions. A graduate grade point average is used when the applicant has attained at least 24 graduate semester hours.

Applicants whose undergraduate GPA was less than a 2.9 may still be admitted to the Graduate Certificate in Real Estate Development program by meeting the admissions requirements for the M.S. Real Estate program.

## Course Requirements

| **Foundation Course** | | |
| --- | --- | --- |
| REAE 5311 | REAL ESTATE ANALYSIS | 3 |
| **Required Courses** | | |
| REAE 5314 | SEMINAR IN REAL ESTATE DEVELOPMENT | 3 |
| REAE 5321 | SEMINAR IN REAL ESTATE INVESTMENT | 3 |
| REAE 5319 | SEMINAR IN REAL ESTATE FINANCE | 3 |
| REAE 5334 | SEMINAR IN REAL ESTATE APPRAISAL | 3 |
| **Total Hours** | | **15** |

## Use of Courses Toward Degree Program

Students that initially enroll in the Graduate Certificate in Real Estate Development may later use up to 15 hours of coursework from the Certificate program toward the Master of Science in Real Estate degree.

You may be entitled to know what information The University of Texas at Arlington (UT Arlington) collects concerning you. You may review and have UT Arlington correct this information according to procedures set forth in UTS139 (https://www.utsystem.edu/board-of-regents/policy-library/policies/uts139-texas-public-information-act/). The law is found in sections 552.021 (http://www.statutes.legis.state.tx.us/Docs/GV/htm/GV.552.htm#552021), 552.023 (http://www.statutes.legis.state.tx.us/Docs/GV/htm/GV.552.htm#552023) and 559.004 (http://www.statutes.legis.state.tx.us/Docs/GV/htm/GV.559.htm#559004) of the Texas Government Code. For more information, see our Privacy Policy (https://www.uta.edu/legalaffairs/notices/legal-and-privacy-notice.php).