ACTUARIAL STUDIES INFORMATION
The University of Texas at Austin

2009 – 2010

Note that even more extensive and detailed information than is contained in this document can be found on the actuarial Website starting at `utactuary.info` .

Actuarial careers

The job of an *actuary* has consistently been ranked by the Wall Street Journal's *Jobs Rated Almanac* as the number one or two job in the United States. So what's an actuary? Actuaries use mathematical skills to define, analyze, and solve business problems involving the cost of possible future events. They are employed by such organizations as insurance companies, financial institutions, consulting firms, industrial corporations, government agencies, universities, accounting firms, and labor unions. Actuarial work includes: projecting how a new auto-safety law will change insurance claims; investigating how life-insurance reserves and future premiums might balance future claims; estimating the benefit costs of a labor contract; analyzing investment risks; projecting financial costs of an epidemic; and so on.

Professional societies of actuaries administer a series of examinations for persons wishing to qualify as an Associate or a Fellow as proof of their status as an actuary; while in college, most actuarial students will complete one to five Associateship exams—described in the section Professional certification and the UT program on page 3—and most such students' programs should include classes that cover the content of four or five exams. Any student possessing strong mathematical problem-solving skills and an interest in a business career should consider the actuarial profession. Recent UT-Austin actuarial students that have passed one or two exams have been offered starting annual salaries of about $55,000–$65,000 upon graduation.

Actuarial studies at UT-Austin

Actuarial studies at UT-Austin has a long and distinguished history of producing well-prepared students, many of whom have become leaders of the actuarial profession. The present Director of the program, housed in the Mathematics Department, is Dr. James W. Daniel (an Associate of the Society of Actuaries), a UT-Austin Distinguished Teaching Professor and the Paul V. Montgomery Centennial Memorial Professor of Actuarial Mathematics. New to the faculty as of summer 2009 is Dr. Mark Maxwell (an Associate of the Society of Actuaries), who will succeed Daniel as Director upon Daniel's 31 August 2010 retirement. Dr. Leslie Vaaler, the Buck Consultants Associate Director of Actuarial Studies, and Dr. Milica Cudina also primarily teach actuarial classes.

Majors
While there are special actuarial options (see Possible schedules for classes on page 5) within the undergraduate and graduate Mathematics degrees, Actuarial Studies is also available as an informal *concentration* rather than an independent major and is therefore open to students in any major. In the Society of Actuaries classification of U.S. actuarial programs, it qualifies as one of only about 70 Advanced Undergraduate programs and as one of only about 30 Graduate Education or Graduate Education & Research programs—thus providing a thorough preparation for entering an actuarial career.

Besides calculus, matrix algebra, probability, and statistics, four Mathematics Department actuarial courses plus two Actuarial Foundations courses taught by the Mathematics Department anchor the actuarial program; students completing those courses and passing at least one exam can compete well for actuarial jobs. Two other Mathematics actuarial courses, computing courses, Economics courses, Business courses, and public speaking courses compose the remainder of the concentration's core; students completing these would be even more competitive for actuarial jobs. Additional suggested courses provide further breadth and depth, especially for graduate students. See The concentration on page 2.

Because the program requires so much mathematics, many students choose to pursue an undergraduate or graduate degree in Mathematics. Alternatively, students can take these courses as electives and major in any other area. Finance, Accounting, Business Honors, Management Information Systems, and the Risk Management concentration are naturals in Business, for instance. Actuarial employers have hired students from the actuarial program that majored in such diverse fields as Computer Science, Psychology, Electrical Engineering, German, Botany, Music, Physics, and Art History. Students should seek advice from the Undergraduate or Graduate Adviser of any field in which they are considering majoring as well as from Drs. Daniel, Maxwell, or Vaaler. No matter in what field students major, they must meet the requirements of that major in addition to the recommendations for the actuarial concentration.

Students
About 90% of the actuarial students are seeking undergraduate degrees in some major or an M.A. in Mathematics with a special actuarial focus (see Graduate degrees on page 6). About 5% of the students are graduate students seeking a graduate degree in some area other than Mathematics. The remaining 5% are students who already hold an undergraduate degree in some area and are *not* seeking a second degree; rather they enroll in UT-Austin and enter the program in order to take the classes they need to prepare for actuarial exams and compete well for entry-level actuarial jobs.

Support
The actuarial profession strongly supports our program. Professor Daniel works closely with the profession to help graduates of the program find entry-level jobs and to help continuing students find summer internships. For information on the financial aid available especially for actuarial students (primarily for continuing students), see the announcement **Financial Aid for 2010 – 2011 for Actuarial Students at UT-Austin**.

The concentration

The core of the concentration in Actuarial Studies consists of the Core Courses listed below; these cover the material tested in five actuarial examinations and three subjects validated by educational experience required for Associateship status. The most essential of these—indicated in **boldface**—are the courses most often taken by students who major in something other than Mathematics or Business.

Some Additional Courses listed below are strongly recommended. A strong undergraduate preparation would include most of the Core Courses and possibly some Additional Courses; see Undergraduate degrees on page 5. A strong graduate preparation would include all the Core Courses (some as undergraduate background) plus some Additional Courses; see Graduate degrees on page 6. NOTE: an indication below such as "usually Fall only" means that that class is always offered in the indicated semester and *might* be offered in the other long semester depending on teaching-staff availability and demand—check with the Course Schedule, or Drs. Daniel, Maxwell, or Vaaler.

Core Courses
Basic computer programming, such as CS303E, ASE201, or MIS304
M408K, L, & M (or 408C & D): Calculus [KLM recommended as more reasonably paced.]
ACF329 (= M389F): Theory of interest; prerequisite M408L or 408D
ACF129D: Introductory actuarial financial mathematics; prerequisite credit with a grade of C or better (or current registration) in ACF329 (=M389F); usually Spring only
M341 or 340L: Linear algebra
M362K: Probability
M358K (or 378K): Statistics
M339J (= 389J): Probability models with actuarial applications; prerequisites M362K and 358K (or 378K), each with a grade of C or better; usually Spring only
M339U (= 389U): Actuarial contingent payments I; prerequisites M362K with a grade of C or better, and grades of C or better (or current registration) in both ACF329 (= M389F) and M341 (or 340L) ; usually Fall only
M339V (= 389V): Actuarial contingent payments II; prerequisites grades of C or better in both M339U (= 389U) and ACF329 (= M389F); usually Spring only
M339W (=389W): Financial mathematics for actuarial applications; prerequisites grades of C or better in ACF329 (= M389F) and M362K, and credit for ACF129D (or a grade of C or better in FIN377.2); usually Fall only
M349P (= 389P): Actuarial statistical estimates; prerequisites grades of C or better in both M339J (= 389J) and 341 (or 340L); usually Fall only

M349R: Applied regression and time series; prerequisite any introductory statistics course; usually Spring only
At least two of the preceding four courses "V", "W", "P", and "R".
ACC311–312 (or ACC310F): Accounting [*Note* that actuarial students neither in Business nor in Mathematics need to petition Business to enroll in restricted Business-major classes including ACC311-312, FIN357, FIN377.2, and RM357E & 369K & 377—for which courses actuarial Mathematics students have blanket special permission.]
Computer programming, such as CS313E, 326E, or 327E
Spreadsheet software knowledge (possibly by taking an online course—see http://knowledge.learnitonline.com/educate/onlinelearning/marketing/frame.jsp?school=utaustin)
Database software knowledge (possibly by taking CS327E or an online course—see http://knowledge.learnitonline.com/educate/onlinelearning/marketing/frame.jsp?school=utaustin)
Public speaking
ECO304K & L: Economics
FIN357: Finance [*See* ACC311–312 note. Among the prerequisites, Math-major actuarial students may skip BA324, substitute ACC310F for ACC311-312, and substitute M358K or M378K for STA309; ECO304K & L are also required.]

Additional Courses

M139S (=189S): Seminar on actuarial practice; prerequisite grades of C or better in all of the following: ACF329 (= M389F), M339J (= 389J) or 339U (= 389U), and in addition at least one of (or current registration in) M339U (=389U) & 339V (=389V) & 339J (=389J) & 349P (=389P); Spring only
M175-W substantial-writing-component class based on M139S (= 189S); prerequisite simultaneous registration in M139S (= 189S); Spring only
M362M (can be taken as M394C): Introduction to stochastic processes; prerequisites M362K and 341 (or 340L)
"M362N" (first taught as a topic under M375T; can be taken as M394C): continuation of M362M; prerequisite M362M
M374G (= 384G): Regression analysis; Fall only
RM357E: Risk management [*See* ACC311–312 note.]
RM369K: Pensions, and health & life insurance [*See* ACC311–312 note.]
RM377: Property & casualty insurance [*See* ACC311–312 note.]
LEB320F: Business law foundations
MAN320F: Management foundations
MKT320F: Marketing foundations
FIN367: Investments [*Not* part of the blanket permission mentioned in the ACC311–312 note.]
FIN377.2: Financial risk management (Options) [*See* ACC311–312 note. For actuarial students, only FIN357 is a prerequisite.]
STA376: Statistics in business forecasting [Note for FIN367 above applies here as well.]
MIS383N topics: Computational finance, or Financial engineering
MSC380 topics: Financial optimization, or Mathematics in finance
RM395 topics: Introduction to risk management, Managing financial risk, Risk management & finance, Managing environmental risk, Managing international risk, or Managing employee risks & benefits
STA380 topics: Correlation & regression analysis, Forecasting, or Risk analysis & management

Professional certification and the UT program

> *Passing the exams of the Society of Actuaries (the SoA) or the Casualty Actuarial Society (the CAS) is absolutely essential to a successful actuarial career; students that have passed one or two exams have much better employment opportunities and salaries for both permanent jobs and summer internships.*

Detailed official information on certification and exams is available from the SoA on its Website at www.soa.org/education/exam-req/ and from the CAS on its Website at www.casact.org/admissions/. This document that you are reading is an *unofficial* guide for UT-Austin actuarial students to the most relevant aspects of the systems.

Education is the basis for certification by the SoA or CAS. Some subjects are required as background, some are validated by educational experience, and some are validated by exams administered by the CAS or SoA.

Subjects required as background.
Background subjects needed for success as an actuary—but not formally validated—include calculus (M408C & D or K & L & M), linear algebra (M341 or 340L), accounting (ACC310F or 311-2), business law (LEB320F or 323), and mathematical statistics (M358K or 378K)—and note that statistics *is* examined by the CAS as part of its Exam 3L.

Subjects validated by educational experience (VEE).
Knowledge of these subjects is most commonly validated by making at least a B- in a college course accepted by the CAS and SoA, although other validation options exist. The subjects, and the most-commonly-used UT-Austin courses automatically accepted for validation by the CAS and SoA, are: micro- and macro-economics (ECO304K & L), business finance (FIN357), and practical data analysis using regression and time series (M349R); you can find the list of all UT-Austin approved courses under the "U of Texas-Austin" listing at `www.soa.org/education/exam-req/edu-vee.aspx`.

Subjects validated by CAS or SoA Preliminary Exams.
SoA Exams P, FM, MFE, and C are jointly administered by the CAS—which denotes them by 1, 2, 3F, and 4—and SoA and count in both the CAS and SoA certification systems. For the CAS, the remaining Preliminary Exam is CAS Exam 3L. For the SoA, the remaining Preliminary Exam is MLC. Since these Preliminary Exams are the most likely to be relevant to UT-Austin actuarial students, they are the only ones described further here; for detailed information on the Preliminary Exams and the other qualification procedures, see the sources referenced four paragraphs before this one.

      Exams P/1, FM/2, MFE/3F, MLC, 3L, and C/4. Content of these Preliminary Exams is described briefly as follows.

      <u>Joint Exam P/1</u> covers calculus-based probability, with many problems set as word problems involving risk.

      <u>Joint Exam FM/2</u> covers interest theory and introductory financial mathematics.

      <u>SoA Exam MLC</u> covers "life contingent" actuarial models, including contingent-payment models and survival models; and special stochastic processes.

      <u>Joint Exam MFE/3F</u> covers "financial economics": the basic mathematical analysis of options and other financial derivatives.

      <u>CAS Exam 3L</u> covers the same general topics as SoA Exam MLC, with different emphases, as well as mathematical statistics. The CAS grants credit for Exam 3L to anyone passing SoA Exam MLC.

      <u>Joint Exam C/4</u> covers simple risk measures; frequency- and severity-of-loss and compound models; simulation and its use in modeling; and construction and validation of actuarial models, including credibility theory and estimating and fitting survival models and frequency- and severity-of-loss models.

The Joint SoA/CAS Exam MFE/3F is given in Austin each May and November. Joint Exams P/1, FM/2, and C/4 are computer-based and are given in Austin more often—check with the SoA or CAS for details. Exams MLC and 3L that are specifically for the SoA or the CAS are also usually given in Spring and Fall in Austin. Detailed information on the exam systems is available from the SoA and the CAS; phone 847/706-3500 or 703/276-3100, respectively, or see `www.soa.org` or `www.casact.org`.

A possible Preliminary Exam schedule for undergraduate students that become interested in actuarial studies as freshmen follows; students that undertake actuarial studies later in their undergraduate careers may well have quite different schedules. The exams can be taken in any order.

      Joint Exam P/1: near the middle or end of the Sophomore year, or later

      Joint Exam FM/2: May of the Sophomore year, or later

      Either SoA Exam MLC or CAS Exam 3L or Joint Exam MFE/3F or C/4: November of the Senior year, or later

Possible schedules for graduate students may vary enormously, depending on their exam status upon arrival.

Some UT courses that cover material for the Preliminary Exams are as follows:

      Joint Exam P/1: M362K

      Joint Exam FM/2: ACF329 (= M389F) & ACF129D (or FIN377.2, or self study)

      SoA Exam MLC: M339U (= 389U) & 339V (= 389V)

      Joint Exam MFE/3F: M339W (= 389W)

      CAS Exam 3L: M339U (= 389U) & 339V (= 389V) & 358K (or 378K)

      Joint Exam C/4: M339J (= 389J) & 349P (= 389P)

Possible schedules for classes

There are as many possible schedules for taking actuarial classes as there are students—especially since actuarial students come to the program at various points in their education. Since the actuarial program is an informal concentration as well as a formal option under the B.S. in Mathematics and the M.A. in Mathematics, flexibility is possible in order to meet each student's needs and circumstances. The undergraduate class schedules sketched below would be ideal for an entering freshman already interested in becoming an actuary, but they should provide rough guidance for others as well—including for students who already have an undergraduate degree but are not pursuing a graduate actuarial program. Those interested in pursuing a graduate actuarial program should see <u>Graduate degrees</u> on page 6**.**

Undergraduate degrees
Included here are detailed sample schedules for students seeking the B.S. in Mathematics (Actuarial Option) and for students majoring in some area of the College of Business Administration, since these two groups constitute the majority of undergraduate actuarial students. Other students should be able to get ideas for patterns of classes by seeing when the most essential core courses (in **boldface**) and other core courses (in *italics*) appear in the sample schedules; students should see Drs. Daniel (RLM11.174), Maxwell (RLM11.168), or Vaaler (RLM12.124) for advice tailored to their specific needs.

MATHEMATICS. The Natural Sciences College catalog and the Mathematics Department's advising documents contain official information on majoring in Mathematics; what follows is a brief sketch of how to concentrate in Actuarial Studies as a Mathematics major.

A high proportion of actuarial students majors in Mathematics in part because of convenience: a student that takes the concentration's core Mathematics courses is only two Mathematics courses short of meeting the Math-course requirements for a B.A. in Mathematics, for instance. Those two courses are somewhat theoretical and proof-oriented, so students who dislike or struggle with such material sometimes choose a different major. Students seeking the B.A. in Mathematics or the B.S. in Mathemaitcs (*not* the Actuarial Option) should be able to get ideas for patterns of classes by seeing when the most essential core courses (in **boldface**) and other core courses (in *italics*) appear in the sample schedule below; students should see Drs. Daniel (RLM11.174), Maxwell (RLM11.168), or Vaaler (RLM12.124) for advice tailored to their specific needs.

      <u>B.S. in Mathematics (Actuarial Option).</u> Among the 126 hours required are both General Education requirements and Major requirements. The General Education requirements include: Area A [RHE306; E316K]; foreign language proficiency (3 semesters); 2 substantial-writing-component classes including one upper-division (such as M175-W associated with the actuarial class M139S); Area B [6 hours of American government including Texas government; 6 hours of American history]; Area C [8 hours of one science other than mathematics or computer science]; and Area D [6 hours from one of architecture, classics, fine arts, or philosophy (at most 3 hours logic)]. The Major requirements include: M408K&L&M (or C&D); M341 (or 340L if taken before becoming a Mathematics major); M362K; M358K or 378K; at least one of M328K, 343K, 361, 361K, 365C, 367K, 373K; ACF329; M339J; 339U; at least two of M339V, 339W, 349P, 349R; ECO304K&L; ACC310F or both ACC311 & 312; FIN357; and at least eight additional upper-division hours (in order to total at least 40 hours with at least 32 upper-division) from Mathematics, from Actuarial Foundations, or from ECO420K, RM357E or 369K or 377, FIN377.2 or 354* or 367*, LEB320F or 323*, MIS325* or 333K*—where * indicates that special permission of the Business College is required for non-CBA students to enroll. One <u>possible</u> pattern of courses follows; the most essential core courses appear in **boldface** and other core courses appear in *italics*. The parenthetical "if KLM" indicates a suggested course if the recommended calculus sequence M408K & L & M is taken, while the parenthetical "if CD" indicates a suggested course if the alternative M408C & D is taken.

      Fall #1: **M408K** (or **408C**), RHE306, FrnLng506, AreaC4hr
      Spring #1**:** **M408L** (or **408D**)**,** FrnLng507, E316K, AreaC4hr
      Fall #2: **M408M** (if KLM) or Elective3hr (if CD), **M362K** or **ACF329**, *ECO304K, ACC311* (or *310F*), FrnLng3hr
      Spring #2: **M341**, **ACF329** or **M362K**, *ECO304L, ACC312* (if *ACC311*) or Elective3hr, AreaD3hr
            (PHL313K?), SubstWrComp1hr
      Fall #3: **M358K** (or **378K**), **M339U**, *computer programming*, GOV310L, AmHst3hr
      Spring #3: **M339J**, **ACF129D**, one of List1 below, one of List2 below, *FIN357*
      Fall #4: Two of List2 below, GOV312L, AreaD3hr (non-logic PHL?), AmHst3hr
      Spring #4: M139S, M175-W, one of List2 below, *Public speaking*, Elective3hr, Elective3hr, UprDivElective3hr
      List1: M328K, 343K, 361, 361K, 365C, 367K, 373K
      List2: *M339V* or *339W* or *349P* or *349R* or 362M or "362N" or other upper-division Mathematics, ECO420K,
            RM357E or 369K or 377, FIN377.2 or 354* or 367*, LEB320F or 323*, MIS325* or 333K* [* indicates
            special permission of the Business College required for non-CBA students to enroll]

*For advice, see **both** Dr. Daniel (or Dr. Maxwell or Dr. Vaaler) and the Math Department's professional advisers in RLM4.101.*

COLLEGE OF BUSINESS ADMINISTRATION. Combining the actuarial concentration with a major within the College of Business Administration (CBA) leading to a B.B.A. provides an excellent mix of both analytical and business skills. CBA students must concentrate many of their free electives in courses taught by the Mathematics Department and especially must be certain to take the *full* calculus sequence M408C&D (or K&L&M) rather than the partial sequence M408K&L required by the CBA; either full calculus sequence meets the CBA mathematics requirement and in fact is recommended by the CBA for students with strong math skills. Advice is available from Mathematics advisers in RLM 4.101 on which sequence to take and where to enter it, depending on the student's various test scores.

The sample schedule that follows shows one <u>possible</u> pattern of classes combining the actuarial concentration with a CBA major; although not prepared by them, CBA advisers have stated that this is a reasonable example. Rather than assume a specific major such as Accounting or Finance, the sample lists major courses as Major, much as unspecified natural science is listed as Science, unspecified social science is listed as Social Science, and so on. The most essential actuarial core courses appear in **boldface** and other core courses appear in *italics*.

> Fall #1: **M408C**, *ECO304K*, RHE306, MIS301, Arts or Humanities
> Spring #1: **M408D,** *ECO304L*, BA101S, Psychology or Sociology or Anthropology, Psychology or Sociology or Anthropology or Arts or Humanities, computer programming
> Fall #2: *ACC311*, E316K, BA324, Science, Government, History
> Spring #2: *ACC312*, STA309, Science, Government, History, *Public speaking*
> Fall #3: Major, LEB323, FIN357, **M362K, ACF329**
> Spring #3: Major, Major, Business internship/practicum, **M358K (or 378K)**, **M340L**, **ACF129D**
> Fall #4: Major, Major, OM335 or MAN336, MKT337, **M339U**
> Spring #4: Major, Major, *M339V*, **M339J**, *M349R*.

*For advice, see **both** Dr. Daniel (or Dr. Maxwell or Dr. Vaaler) and the major department's Undergraduate Adviser.*

Graduate degrees

The Mathematics Department offers a special focus on Actuarial Studies within the general requirements of the standard M.A. in Mathematics, as described below. Students successful in this program receive an M.A. in Mathematics while taking classes that are actuarial or actuarially related.

Alternatively, graduate students can take actuarial classes while pursuing some graduate degree not specifically emphasizing actuarial science. The majority of such students have sought an M.S. in Statistics, using Actuarial Studies as their formal minor.

Many students that already have an undergraduate degree choose to participate in the Actuarial Studies program as a non-degree-candidate or—at least formally—as a seeker of a second undergraduate degree; such students typically follow the same pattern of classes as do undergraduate Mathematics majors.

There is not a formal Ph.D. program in Actuarial Studies at The University, but students have occasionally received Ph.D.'s in various fields for actuarial research. Although none of the actuarial Mathematics faculty are currently active in actuarial research, there are faculty members in various areas such as risk management, computational finance, and statistics that are performing distinguished research in actuarial or actuarially related areas.

M.A. IN MATHEMATICS (FOCUS ON ACTUARIAL STUDIES). The M.A. in Mathematics requires at least 30 semester-credit-hours of coursework, plus either a Report for 3 hours or an additional Mathematics class for 3 hours*; for the Actuarial Studies focus, the Report must be on an actuarial project approved by the Director of Actuarial Studies and the courses must be as specified in the four points below.* At most nine hours can be (upper-division) undergraduate hours, with no more than six of those nine in a single subject.

An M.A. Report is usually a write-up of a work project or a study project rather than of original research; work for an Actuarial Studies M.A. Report is usually performed with the guidance of a working actuary.

For information on admission and financial aid, connect to the Mathematics graduate program Website starting at www.ma.utexas.edu/dev/math/Graduate/index.html . **NOTE** that although the M.A. program is small—we usually admit and financially support four new students each fall and sometimes admit others without support—the actuarial

mathematics classes often are *not* small, since they meet with the corresponding undergraduate classes (but with additional questions on tests).

The requirements for the 30 (or 33, if no Report) hours of coursework for the actuarial focus within the M.A. in Mathematics are as follows; no class can be used to provide hours for more than one of these four requirements.

1) 15 hours of actuarial mathematics classes M389U Actuarial contingent payments I, 389V Actuarial contingent payments II, 389W Financial mathematics for actuarial applications, 389J Probability models with actuarial applications, and 389P Actuarial statistical estimates.

2) As a minor, 6 hours of non-Mathematics-Department classes from among those on the Recommended Classes list below or as approved by the Director of Actuarial Studies and the Mathematics Graduate Adviser.

3) 3 (or 6, if no Report) hours of Mathematics-Department classes as approved by the Director of Actuarial Studies and the Mathematics Graduate Adviser.

4) 6 hours of Mathematics-Department classes or non-Mathematics-Department classes as approved by the Director of Actuarial Studies and the Mathematics Graduate Adviser, at least 3 of which must come from the Recommended Classes list below.

Recommended Classes (core classes are in *italics*)

M389F = ACF329: Interest theory
ACF129D: Introductory actuarial financial mathematics
M349R: Applied regression and time series
ECO420K: Intermediate microeconomic theory
FIN357: Business finance
FIN377.2: Financial risk management (Options)
M384G: Regression analysis
M394C Conference course in probability and statistics (especially when meets with M362M or "362N")
M189S: Seminar on actuarial practice
LEB320F: Business law foundations
MAN320F: Management foundations
MKT320F: Marketing foundations
MIS383N topics: Computational finance, Financial engineering
MSC380 topics: Financial optimization, or Mathematics in finance
RM357E: Introduction to risk management
RM369K: Managing employee risks and benefits
RM377: Property & liability risk management and planning
RM395 topics: Introduction to risk management, Managing financial risk, Risk management & finance,
    Managing environmental risk, Managing international risk, or Managing employee risks &
    benefits
STA376: Statistics in business forecasting
STA380 topics: Correlation & regression analysis, Forecasting, Risk analysis & management
Other classes that may from time to time be added to this list with the approval of the Director of
    Actuarial Studies and the Mathematics Graduate Adviser

Relationships with the professional actuarial community

The UT program receives strong financial support and cooperation from many individuals and organizations in the professional actuarial community throughout the greater Southwest and elsewhere. We received gifts from about 60 individuals and businesses last year as well as support from such professional organizations as the Actuaries Club of the Southwest and the Southwest Actuarial Forum. A couple of dozen companies interview our job-hunting students each year.

We have been especially fortunate to benefit from the advice, support, and participation of the members of two advisory groups for the program. One—the Actuarial Studies Advisory Council—provides advice for the actuarial program on all its activities. The other—the Advisory Board of CBA Alumni in the Actuarial Profession—is composed of CBA (College of Business Administration) alumni of UT-Austin that are interested in encouraging CBA students to participate in the actuarial program. Students with questions about actuarial careers are encouraged to contact any of the listed members.

Actuarial Studies Advisory Council
    Lillian Cho, ASA, Towers Perrin, Dallas, TX
    Philip S. Dial, FSA, Rudd & Wisdom, Austin, TX

Christian Goodman, ASA, Milliman, Dallas, TX
Serhat Guven, FCAS, EMB America, San Antonio, TX
Tim Heslin, FSA, AIG American General Life Insurance, Houston, TX
Brian Kasper, FSA, Ph.D., AEGON Direct Marketing, Plano, TX
Liane Latham, FSA, American National Insurance, Galveston, TX
Shawn Loftus, FSA, USAA Life Insurance, San Antonio, TX
Gagan Nanda, Watson Wyatt Worldwide, Dallas, TX
Sumi Parekh, Mercer, Dallas, TX
Vi Phu, ASA, Towers Perrin, Houston, TX
Roger F. Ray, ASA, Leggette Actuaries, Dallas, TX
George Sanger, FSA, Hewitt Associates, The Woodlands, TX
Tamara Shelton, FSA, Buck Consultants, Dallas, TX
Karen Smith, FSA, Nova Pension Valuations, Houston, TX
Tom Struppeck, ASA, FCAS, Ph.D., Longhorn Analytics, Austin, TX
Alan Taper, FSA, Hewitt Associates, Irving, TX
Catherine Taylor (Council Chair), FCAS, USAA Insurance, San Antonio, TX
Glenn Tobleman, FSA, FCAS, Lewis & Ellis, Richardson, TX
Gregory Young, ASA, PricewaterhouseCoopers, Dallas, TX
Valerie Zinzer, FSA, Nova Pension Valuations, Austin, TX

Advisory Board of CBA Alumni in the Actuarial Profession
Bryan Avant, ASA, Watson Wyatt, Houston, TX
Wayne Barnard, FSA, AIG American General Life Insurance, Houston, TX
Frank V. Broll, Jr., FSA, American National Insurance, Galveston, TX
Mark Callahan, FCAS, XL America, Hartford, CT
Rick Davenport, FSA, Deloitte Consulting, Dallas, TX
Allen Jacobson, Jr., FSA, USAA Life Insurance, San Antonio, TX
Linda A. Konarik, ASA, Buck Consultants, Houston, TX
Richard Mallett, FSA, Watson Wyatt Worldwide, Dallas, TX
Lorie Pate, ACAS, Tyler, TX
Matt Sicking, ASA, Watson Wyatt Worldwide, Dallas, TX
Alan S. Taper (Board Chair), FSA, Hewitt Associates, Irving, TX
Mark Trieb, FSA, Milliman, Dallas, TX
Gregory Young, ASA, PricewaterhouseCoopers, Dallas, TX

The student experience

With only about 200 students participating, the program has a small and friendly feeling despite being imbedded in a huge university. The typical student will have the same instructors and many of the same classmates in four or five different classes spread over three or four years.

The students' Actuarial Science Club organizes talks ("What is a casualty actuary?", for example), panels ("How to interview for an actuarial job"), study groups for professional exams, intensive exam-prep review seminars, and the like. Its reception at the Actuarial Studies Advisory Council meetings lets the students meet the influential actuaries that advise the program.

The University of Texas Actuarial Alumni Association organizes activites such as career-info panels and mock job interviews, allowing present students to meet with recent graduates and hear first-hand about their early work experiences.

Interested?

For more information, contact Dr. Daniel (512/471-7168; daniel@math.utexas.edu; RLM11.174), Dr. Maxwell (512/471-7169; maxwell@math.utexas.edu; RLM11.168), or Dr. Vaaler (512/471-6948; lvaaler@math.utexas.edu; RLM12.142). The RLM building is on the southeast corner of Speedway and Dean Keeton Street (formerly 26th Street). Even more extensive and detailed information than is contained in this document can be found on the actuarial Website starting at utactuary.info .