ACTUARIALSCIENCE
B.S. DEGREE PLANNINGSHEET WITH
EARLY ACCELERATED MASTER OPTION

T-Transfer Credit
M-MaryvilleCredit

Student Name_____ I.D.# Registrar Signature:

GENERAL EDUCATION (Minimum 47 Credits)	M	T
I. LITERACY (5 courses)		
INTD 101-University Seminar (Required for Freshmen)		
ENGL 101 Writing I: The Writing Process (3)		
ENGL 104 Writing II: Research & Argumentative (3)		
SPCH 110 Oral Communication (3)		
MATH 151 Calculus I (4)		
II. HUMANITIES (5 courses)		
A. Fine Arts (1 course)		
Art, Music, Performance, Aesthetics		
B. Literature/Language (1 course)		
ENGL or Foreign Language		
C. Philosophy (1 course)		
D. Humanities Electives (2 courses)		
ENGL, The Arts/Aesthetics, Foreign Language,		
HUM, PHIL, REL		
III. MATH/SCIENCE (2 courses)		
BIOL, CHEM, PHYS, SCI (1 course)		
MATH 152 Calculus II		
IV. SOCIAL SCIENCE (3 courses)		
Amer. History or Government		
Electives (at least 2 disciplines)		
HIST, PSCI, PSYC, SOC, COMM, ECON		
RECOMMENDED BUSINESS COURSES		
ACCT 210 Financial Accounting (3) VEE		
ECON 203 Principles of Economics (3) VEE		
REMARKS:		
Students who have 64 undergraduate credits at least 20 credits at Maryville University and have completed the courses MATH 251, MATH 371 and ACSC 415 with GPA 3.6 can apply the early Accelerated Master's Option.		

ACTUARIAL SCIENCE CORE (Required 52 Credits)	M	T
DSCI 201 Math Modeling -Excel (3)		
ACSC 305 Insurance and Risk (3)		
ACSC 414 Theory of Interest (3)		
MATH 251 Calculus III (4)		
DSCI 302 Introduction to R (3)		
ACSC 415 Financial Mathematics (3)		
MATH 316 Applied Linear Algebra (3)		
MATH 370 Probability I (3)		
MATH 371 Probability II (3)		
MATH 372 Mathematical Statistics (3) VEE		
ACSC 394 Actuarial Seminar I (3)		
MATH 405/505 Statistical Modeling I (3)		
ACSC 411/611 Derivative Market (3)		
ACSC 416/516 Corporate Finance I (3) VEE		
ACSC 421/521 Actuarial Modeling I (3)		
ACSC 422/522 Actuarial Modeling II (3)		
ACSC 495 Actuarial Seminar II (3)		
RECOMMENDED ELECTIVES		
ACSC 407 Loss Models (3)		
ACSC 410 Introduction to ERM (3)		
ACSC 496 Actuarial Seminar III (3)		
ACSC 498 Actuarial Seminar IV (3)		
ACSC 299/399/499 Internship (3)		
COSC 150 - Introduction to Java Programming (3)		
COSC 151 - Computer Science I (3)		
DSCI 200 Foundations of Data Science (3)		
DSCI 301 Math Modeling –VBA (3)		
DSCI 303 Introduction to Python (3)		
DSCI 304 Introduction to SQL (3)		
DSCI 307 SAS Programming (3)		
DSCI 408 Machine Learning (3)		
DSCI 412 Predictive Modeling (3)		
DSCI 417 Big Data Analytics (3)		

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Graduate

EARLY ACCELERATED MASTER'S OPTION DUAL COURSES (Required 12 Credits)	M	T		M	T
MATH 505 Statistical Modeling I (3)			DSCI 501 Math Modeling (3)		
ACSC 521 Actuarial Modeling I (3)			DSCI 502 Introduction to R (3)		
ACSC 522 Actuarial Modeling II (3)			DSCI 503 Introduction to Python (3)		
ACSC 516 Corporate Finance I (3) VEE			DSCI 504 Introduction to SQL (3)		
ACSC 607 Loss Models (3)			DSCI 507 SAS Programming (3)		
ACSC 611 Derivative Market (3)			DCSI 508 Machine Learning (3)		
DSCI 512 Predictive Modeling (3)			DSCI 613 NoSQL Database (3)		
			DSCI 614 Data Mining (3)		
			DSCI 617 Big Data Analytics (3)		
			DSCI 618 Experimental Design (3)		
			DSCI 619 Deep Learning (3)		
			DSCI 624 Data Visualization (3)		
ACTUARIAL SCIENCE ELECTIVES (24 Credits from ACSC, MATH, DSCI 500+ level)			DSCI 625 Blockchain (3)		
ACSC 510 Risk Theory (3)					
ACSC 514 Theory of Interest (3)					
ACSC 515 Financial Mathematics (3)			**Remarks:**		
ACSC 526 Corporate Finance II (3)			**116 +12 = 128 Credits for B.S. in Actuarial Science**		
ACSC 594 Actuarial Seminar I (3)			40 Actuarial B.S. Major Credits		
ACSC 595 Actuarial Seminar II (3)			12 Actuarial B.S. and M.S. Dual Credits		
DSCI 599/699 Internship (3)			20 Actuarial Elective Credits		
ACSC 610 Introduction to ERM (3)			47 General Education Credits		
ACSC 695 Actuarial Models III (3)			6 credits from Recommended Business Courses		
ACSC 696 Statistical Modeling III (3)					
ACSC 697 Thesis/Research (3)			**12+24=36 Credits for M.S. in Actuarial Science**		
MATH 570 Probability I (3)			12 Actuarial B.S. and M.S. Dual Credits		
MATH 571 Probability II (3)			24 Elective credits from ACSC, MATH, DSCI 500+ level		
MATH 572 Mathematical Statistics (3) VEE			**Total Credits = 152 for B. S. and M. S.**		
			All 36 Master credits from Maryville University		