Mathematics Majors (ALL unless noted)

* Students cannot use credit in both MA 35100 and MA 26500 (Walther 7/30/19)
* MA 27101
	+ Incoming Freshmen - 4 or 5 on BC Calculus AP exam or credit in MA 16100/16500 and MA 16200/16600.  Advanced, math confident student.
	+ Majors in MATH/STAT/ACSC, in Honors College, with an A- in Calculus I and II (if student earns less than A- in Calculus II, student should switch to MA 26100)
* MA 26200 cannot be used to meet the Differential Equations requirement because it does not cover nonlinear systems, does not have a substantial Matlab, and covers topics in less detail than MA 36600.
* MA 26500 (with minimum of B-) can substitute MA 35100, if taken before major (regardless of institution).  Students cannot change to a non-math major to utilize the MA 26500 substitution and then change back to a major in the mathematics area. Test out credit allowed if taken before major or by the 1st week of the student’s first semester at Purdue West Lafayette (more suitable for transfer students that have undistributed credit in this area).
* MA 26600 (with minimum of B-) can substitute MA 36600, if taken before major (regardless of institution).  Students cannot change to a non-math major to utilize the MA 26600 substitution and then change back to a major in the mathematics area. Test out credit allowed if taken before major or by the 1st week of the student’s first semester at Purdue West Lafayette (more suitable for transfer students that have undistributed credit in this area).
* MA 44200 can substitute MA 36200
* MA 44000 can substitute MA 34100
* MA 45000 can substitute MA 45300, but both courses cannot be used for major.
* MA 44000 can be substituted by any 50000 level analysis course (50400 is good option).  Students must have permission of undergraduate chair to take 50000+ level.  This option is for Honors designators, but NOT FOR THE MAHO degree.
* To use MA 51100 to substitute MA 35300—need approval from the Undergraduate Chair—case-by-case basis (Min Chen).
* IE 33500 can be substituted in place of MA 42100 in any major that lists MA 42100.
* Summer courses in MA 26600/MA 26500 while a math major and in order to graduate can be approved on a case by case basis by the Undergraduate Chair.
* MA 46000 is a free elective for all math majors except MAED (is a requirement for MAED)(per e-mail Dr. Chen 4/9/13).
* PSY 20100 cannot be used for credit (is considered a NO COUNT COURSE) in all MATH/STAT/ACSC majors. (per e-mail Dr. Ward 2/28/13 and Min Chen 4/9/2013)
* SOC 38200 cannot be used for credit (is considered a NO COUNT COURSE) in all MATH/STAT/ACSC majors. (per e-mail Dr. Ward 2/28/13 and Min Chen 4/9/2013)
* The math department does not administer credit exams in courses 30000 level and above (11/11/2013)  - NO MA 35100 by exam. (Wiles – 8/11/14)
* *The substitutions below come with a different GPA calculation.*[*See math honors section*](https://wiki.itap.purdue.edu/pages/viewpage.action?pageId=76887398#Honors)*.*
	+ *MA 50300 or MA 55300 can be substituted for MA 45300 or MA 45000 (Walther 10/16/14)*
	+ *MA 52500 or MA 53000 can be substituted for MA 42500 (Walther 10/16/14)*
	+ *MA 50400 or MA 54400 can be substituted for MA 44000 (Walther 10/16/14) – not for MAHO (honors designator only)*
* MA 54400 cannot be substituted for MA 45300 (Walther 10/16/14)
* 500 + Level Permission:
	+ Either the math faculty mentor or Dr. McClure gives permission to the academic advisor or student via e-mail for a student to take a 500+ level course.  If the e-mail is to the student, the  student will need to forward it on to their advisor.
	+ The advisor sends the e-mail to Phil Mummert for the final assessment because Phil is able to pull up the studentʼs background, current coursework, etc. and is also able to physically put in the override.  If there is a question on the student taking the course,  Phil can discuss with Dr. McClure and/or the faculty advisor.
	+ We discussed not allowing undergraduates into the 500 level  courses until open registration since the courses do not tend to fill  up and it gives everyone time to get the overrides and such in the system.
	+ Undergrads should not be taking MA 50300/50400 – they are better off in undergrad honors courses (44000, 44200, 45000).  It is better for strong undergrads to be with other strong undergrads in a challenging course (undergrad honors) vs. in 503/504 with weaker grad students (per. J. McClure 8/18/2015)  Undergraduates may not take MA 50300 without permission from me.  They may not take MA 50400 in fall semesters without permission from me, but in spring and summer anyone may take it; we plan to offer 50400 in most spring and summer terms.  Undergraduates should be strongly encouraged to take 45000 instead of 50300 and 44000-44200 instead of 50400, because honors courses are a better educational experience for them.  But if (for example) an undergraduate has taken 45300 instead of 45000 and wants to go further in algebra then 50300 might be a possibility.
* ECE 36900 can substitute for MA 37500 with approval (case by case), if taken before major. (However, Uli Walther commented (1/25/18): "According to the online syllabus, I would say that there is not really enough of discrete mathematics in it. In comparison when I teach 375, it is completely missing graph theory (which I do for about 5 weeks). Also, I can't imagine that 4 classes of combinatorics can cover what I think should be done in an Intro to Discrete Math course on the combinatorics front.")
* ECE 30200 can substitute for MA/STAT 41600, if taken before major (Walther 7/18/17)
* C- or better in upper division math classes is built in the MyPurduePlan due to pre-requisites.  If a student gets permission to move on, the advisor can put in an exception for the grade lower than a C-.  It is not a graduation requirement, but a requirement to move through the course sequences.
* MA 30300 and MA 26200 and MA 36600 can all be taken for credit.  MA 30300 and MA 26200 are free electives for all math majors except MAED (is a requirement for MAED).  MA 46200 is a math elective.  (Walther 9/3/15)(Ward for STMA 1/6/16)
* MA 54300 can be used for a math selective for all math majors (Walther 9/9/15)
* MA49000 Elementary Stochastic Processes – approved for math selective for all Math majors (Walther 2/18/14) and is in the “probability/statistics area”
* MA 36600 CANNOT be replaced by MA 30300 + 26200. (Walther, 11/25/15)
* MA 30300 can be used for free elective if not required for the major (Ward 1/6/16)(Walther 9/3/15)
* MA 26200 can be used for free elective (Ward 1/6/16)(Walther 9/3/15)
* MA 45401 replaced MA 45400 in Fall 2017.
* One course cannot be used to fulfill both a math selective and another math requirement (i.e. no “double-dipping”)
* Math Majors cannot complete a MATH minor
	+ If a math student asks for a STAT minor, the courses are the same for the MASI degree, so it would probably be in the student’s best interest to just add the MASI as a secondary degree instead of the STAT minor.
* STMA majors has the exact same requirements as MASI and student's can (and should) have both on transcripts
* MA 51400 can substitute for CS 31400 in MABU (Walther, 3/10/2020).
* MA 55300 Intro to Abstract Algebra and MA 57200Intro to Alg Topology approved to be use for Math selectives. (Walther, 4/27/21)
* Due to the overlap of CS 18200 and MA 37500, MACS students will use MA 37500 to meet the requirement.  They can therefore by-pass the CS 18200 requirement for CS 25100 and CS 25000, but an email to CS advisor is necessary to get override.  However, CS 18200 cannot be used to meet the MA 37500 requirement.   Students that have taken CS 18200 ,and then decide to add a math major that requires MA 37500 - they will need to take MA 37500.  (Walther, 8/10/2021).
* MA 49000 Abstract Algebra W Application with Dr. McReynolds in place of MA 45300 in the MATH major is allowed (Walther 1/14/2020, 9/13/2021)
* MA 49000-“Mathematical modeling” be used as a Math selective (Walther 2/10/2022)
* CS 17700, CS 17600, CS 15900, CS 18000 - only ONE course can be used for any credit.

Selective Courses for MATH, MAHO, MACS, MASI

* Courses may be considered are those that are pure math and NOT intended for other majors such as MAED, ACSC or Engineering.
* Acceptable courses are: (these do not need additional approval)
	+ MA 57500 Graph Theory
	+ For Physics/Math dual majors—PHYS 52700, 52800, 60000, 60100
* Other MA 49000 courses approved on a case-by-case basis by the Undergraduate Chair.
* MA 46000, MA 37300, MA 30300, MA 30400 are NOT allowed as math selectives, but can be used for free elective
	+ MA 48400
		- Math majors - MA 48400 is free elective only
		- Math Ed majors -  MA 48400 is a MA selective
		- Dual major in Math/Math Ed - MA selective as long as they finish the degree requirements for Math Ed
* MA 37500 meets the pre-requisite for CS 24000, but advisor will need to request a pre-req override from a CS advisor.
* ECE 26400 for our CS 24000 and ECE 36800 for our CS 25100 per Dr. Walther e-mail 07/22/15
* IE 53000 can be used the same as STAT 51300 for MASI (it is a cross listed course) Dr. Walther 10/12/16
* MASI ONLY:
	+ Big Data Analysis, STAT 29000 (3 credits) can be used as a STAT Selective the MASI degree. (Walther 4/1/14)
	+ STAT 53200 Stochastic processes is approved for a STAT Selective per e-mail Dr. Sellke 10/11/2016 (STAT 51900 should be taken first) – Dr. McClure e-mail 9/20/17
	+ IE 23000 can substitute STAT 416 (Walther, 1/17/17)
	+ IE 33000 may be allowed to substitute for STAT 35000 in select cases.  Please ask for approval from STAT Department (Walther, 1/17/17)
	+ STAT 59800 Intro To  Statistical Computing can be used as a STAT Selective (Walther, 3/1/18)
	+ CS 37300, Data Mining and Machine Learning, and CS 49000, Large Scale Data Analytics, can both be used as STAT selectives (Walther, 10/16/18)
	+ Confirmed that STAT 59800 Intro To Statistical Computing can be used as STAT Selective (Walther, 3/1/2018)
	+ STAT/MA 41600 and STAT 51600 cannot both be used for selectives due to overlap in content (Walther, 8/23/2021)
	+ IE 33600 Operations Research - Stochastic Models CANNOT be used as a STAT selective (Walther 12/2/2021)
	+ One 3 credit combination of the courses below can be used to meet one STAT Selective (Walther 3/4/2021).
		- STAT 19000 Data Mine I and II

		STAT 29000 Data Mine III and IV

		STAT 39000 Data Mine V and VI

		STAT 49000 Data Mine VII and VIII

MAHO - Math Honors

 must include MA 44000, MA 44200, MA 45000, OR Approved Course with GPA of 3.5 among the three courses (Graduate Level courses have special GPA calculations listed below).

* MA 34100 and MA 44000 are both allowed for credit (440 as a math selective)
* MA 36200 and MA 44200 are both allowed for credit (442 as a math selective)
* Credit for only one of MA 45300 and MA 45000 is allowed.
* Substitutions may be requested on a case-by-case basis from Undergraduate Chair
* Only one major MAHO or MATH may be granted.
* Graduate Level courses can also be used.  In the past MA 54400, 55300 have been used, but contact the Undergraduate Chair for final approval.
	+ If an undergraduate takes one of the Graduate Level courses then for the purpose of determining math honors status from the GPA point of view, the GPA contributions from such course are to be taken as:
		- the expected value for grades below C-
		- (1+ the numeric grade value) for grades of C- and above.
		- So, for example, for the honors status GPA computation, a B- in 54400 counts as (1+2.66) GPA points, while a D in that same course counts for 1 GPA point.  The rationale is that Graduate Level courses are viewed as distinctly more difficult than undergraduate honors classes and the goal is to not destroy honors status because of GPA computations of adventurous AND successful students that take Graduate Level courses. Notwithstanding the Graduate Level adjustments, the undergraduate chair reserves the right to confer honor status (for GPA reasons) based on their complete academic record.

MAED - Math Education

* Acceptable selectives are at 30000 level or higher.  These include: MA 34100, MA 35300, MA 36200, MA 38500, MA 42100, MA 42500, MA 44000, MA 44200, MA 45400, MA 48400
* CANNOT use MA 37300, MA 30300, or MA 30400 for Math selective
* MATH 300 (from IUPUI) is an acceptable Math selective
* Cannot have credit for both STAT 31100 and MA/STAT 41600.  MAED/MATH dual majors should take MA/STAT 41600.
* MA 48400 may be used as a selective for the MATH/MAED dual majors and MAED only majors.
* Honors Designator in MAED needs ONLY MA 44000 and MA 45000 with GPA=3.50
* EDCI 22200 can be used the same way as MA 48400 for FALL 2020 SEMESTER ONLY.  MA 48400 was not able to be taught due to the pandemic.

MACS - Math with Computer Science

* Due to the overlap of CS 18200 and MA 37500, MACS students will use MA 37500 to meet the requirement.  They can therefore by-pass the CS 18200 requirement for CS 25100 and CS 25000, but an email to CS advisor is necessary to get override.  However, CS 18200 cannot be used to meet the MA 37500 requirement.  ~~The MA 37500 may also be used as one of the five major courses required on the CS minor.~~  MA 37500 can no longer be used for the CS minor (10/31/16)
* CS 35500 may be substituted for the CS selective in addition to the courses on the Plan of Study.
* Dual majors in MACS and ECE may use ECE 26400 for our CS 24000 and ECE 36800 for our CS 25100 per Dr. Walther e-mail 11/25/14
* MA 51400 can be used the same as CS 51400.  Students can use both CS 31400 and MA/CS 51400 to meet degree requirements; in this case, MA/CS 51400 fulfills the CS Selective requirement. (Walther 1/17/17).
* If student only take one of MA/CS 51400 or CS 31400, it can count for CS 31400 requirement (Walther 12/15/2020)
* CS 37300 and CS 47100 can be used for the CS Selective requirement (Walther, 10/16/18 and 10/24/18).
* CS 15900 and CS 18000 cannot both be used for credit.  Students should use CS 18000 and CS 15900 will not be used in the overall credit count when auditing the student.  (Walther, 8/26/2020)

MATH minor

* Calculus I, II, III are PRE-REQUISTES to the minor.  Transfer credit and credit exams are allowed for these courses.
* Transfer and Credit exams are NOT allowed for MA 26600 or MA 26500 towards the minor.
* MA 35100 is strongly suggested instead of MA 26500.
* B- or better is needed to use either MA 26500 or MA 26600 for the minor.
* MA 26200, MA 37300, and MA 46000 are not allowed for the minor.
* Substitutions for the minor are rare, especially in Areas I and II.
* Acceptable courses for Area III are noted on the Minor sheet and can include any MA Selectives for the MATH major
* Only ONE Differential Equation course allowed in Area III.
* ECE 36900 CANNOT be substituted for the math minor.
* Cannot use both MA 45300 and MA 45000 for the minor.
* MA 49000 Elementary Stochastic Processes – approved for math selective for all math minor(Walther  and McClure (11/4/15) and is in the “probability/statistics area”
* MA 26400 can be used like MA 26600 if from a Regional campus.
* ECE 26400 for CS 24000 and ECE 36800 for CS 25100 is always allowed regardless of Catalog Term (Walther, 8/12/2020)

ACSC - Actuarial Science and ASHO - Actuarial Science Honors

* MGMT 51100 can be substituted for MGMT 41100.  MGMT 51100 has been approved by the SOA for VEE.  This course should only be advised if a student is wanting a challenge or cannot add MGMT 41100 for various reasons. (Penney 2/3/16)
* STAT 47201 Act Model Life Cont (4 credits) Pre-requisites are C- or better in MA 37300 and STAT 41600.  Course is FALL only.
* STAT 47301 Intro To Derivatives Pricing (4 credits)  Pre-requisites are C- or better in MA 37300 and STAT 41600.  Course is SPRING only.
* CPT/CNIT 17500 is allowed as either free elective credits or to meet CoS computing requirements (ASHO/ACSC ONLY).
* MA 26200 (with B- or better grade) can substitute MA 366 for ACSC, if taken before major.
* Effective Spring 2012 forward - ECON/MGMT courses:  If courses are transferred and come into Purdue as undistributed, MGMT has already evaluated the courses and they cannot be used to meet specific requirements for the ACSC or ASHO degrees.  Students will need to take the courses at Purdue.  Advisor needs to check for duplicate credit once the student has taken the course at Purdue (exceptions are made for some Malaysian coursework).
* 26500 with A or B can substitute 35100 (if taken before math major, regardless of institution)
* 26600 with A or B can substitute 36600 (if taken before math major, regardless of institution)
* Credit for ECON 21000/AGEC 21700 cannot be used toward graduation
* ASHO:  A or B in all MA/STAT courses includes Calculus I, II, and III
* STAP requires no additional courses for students completing ACSC/ASHO
* STAT 49000 SRM can be used in place of STAT 51200 on the STAP plan of study so the ACSC majors can still get a dual.  This will be updated for the Fall 2022 plan of study and they are working on listing it on courses that have STAT 51200 as a pre-req.

Statistics Majors (ALL)

* For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, STAT 35000, STAT 50100, and in no more than one of STAT 50300 and 51100.
* STAT 50600 is allowed as a stat selective for STAP; to use STAT 50600 for STMA requires approval on a case-by-case basis by Stat Dept.
* ECE 30200--Probabilistic Models as a possible substitutions for required courses  - Check with Undergraduate Chair (case by case).  EE 30200 ( now ECE 30200) can substitute STAT 41600, but EE 302 CANNOT substitute STAT 51600
* STAT 50300 can be substituted in place of STAT 35000 for the majors per e-mail from Dr. Ward 4/2/2012.  STAT 35000 is the preferred course.
* Big Data Analysis, STAT 29000 (3 credits) can be used as a STAT Selective for all degrees. (Ward 4/1/14)
* MA 49000 Elementary Stochastic Processes – can be used as a STAT Selective (Doerge 2/27/14)
* Can override STAT 50600 pre-req if student had CS 17700 per Dr. Sellke (10/2015)
* MA 30300 can be used for free elective if not required for the major (Ward 1/6/16)(Walther 9/3/15)
* MA 26200 can be used for free elective (Ward 1/6/16)(Walther 9/3/15)
* STAT 53200 Stochastic processes is approved for a STAT Selective per e-mail Dr. Sellke 10/11/2016 (STAT 51900 should be taken first)
* IE 53000 can be used the same as STAT 51300 (it is a cross listed course) MDW and Sellke email 10/11/2016
* IE 23000 can substitute STAT 41600 (Ward, 1/17/17)
* IE 33000 may be allowed to substitute for STAT 35000 in select cases.  Please ask for approval from STAT Department (Ward, 1/14/16)
* STAT 59800 Analysis Combin (seminar course taught by Mark Ward) can be used as a STAT selective on a case by case basis (Ward, 1/24/17)
* STAT 54500 is appropriate to use as a Statistics elective toward the Statistics major.  The graduate committee doesn't want to be overwhelmed with undergrads in this course, but I suggest this course to really outstanding students (Ward, 4/25/17)
* STAT SELECTIVE (not to publicize)  - STAT 598Z Introduction to Computing for Statisticians -- This is a course that I introduced in 2009 and Vinayak Rao is teaching lately.  It prepares students for harder computational statistics courses, e.g., if they do not have much background, and they are willing to work hard to get ready for STAT 54500.  STAT 598Z is an intensive and fast-paced course, certainly on-par (or harder) than our undergraduate courses.  UG STAT COMMITTEE E-MAIL 10/4/17  Confirmed on 2/28/2018 that STAT 59800 Intro To Statistical Computing can be used as STAT Selective.
* STAT SELECTIVE (not to publicize)  - STAT 545 Introduction to Computational Statistics -- This is the first part of the two-semester sequence for the Ph.D. qualifying exam material in computational statistics.  (STAT 54600 is the second part.)  I think it goes without saying that this is challenging and valuable material. UG STAT COMMITTEE E-MAIL 10/4/17
* STAT SELECTIVE (not to publicize)  - CS 37300 is approved per Dr. Wark (12/7/17)
* STAT 51100 CANNOT be substituted by STAT 43300
* MA/STAT 47400 can be MA/CS/STAT selective
* STAT 42000 Time Series can substitute MA/STAT 47400
* STAT 519 from IUPUI can substitute 51600
* STAT 51900 can be substituted for STAT 41600/51600 in Statistic Plans of Study, but requires permission from the Department for an undergraduate to take the course.
* Statistics 490D: Experimental Design for Causal Inference is approve STAT Selective for major and minor: Ward 4/12/15
* Lower level (non-calculus based) STAT courses cannot be used for any credit for MA or STAT major.  This can include STAT 30100, 22500, and 31100 (unless a MAED major).
* If a student takes STAT 51200, they may not also have credit in AGRY 55300.  If a student does not take STAT 51200, then they can get credit in AGRY 55300. (per e-mail Dr. Ward 4/3/13)
* PSY 20100 cannot be used for credit in any MA/STAT/ACSC major. (per e-mail Dr. Ward 2/28/13 and Min Chen 4/9/2013)
* SOC 38200 cannot be used for credit in any MA/STAT/ACSC major (per e-mail Dr. Ward 4/3/13 and Min Chen 4/9/2013)
* PHIL 35000 cannot be used for credit in any MA/STAT/ACSC major.
* (CHE 32000) is a valid replacement for the STAT 350 on a special case by case approval only (Sellke, 12/14/15)
* Per Jenna Wargo e-mail from Krannert (5/12/16)  - We have the okay for STAT and MATH majors to use STAT 35000 for our minor instead of MGMT 30500.  We were going to add it to the official minor document but need approval from STAT to do that.  Instead it is added in myPurduePlan and not on the official list but I wanted to let you now that it works for the minor.
* STAT majors cannot complete the STAT minor
* STMA majors has the exact same requirements as MASI and student's can (and should) have both on transcripts
* STAP requires no additional courses for students completing ACSC
* Override can be entered by advisor for any course requiring STAT 35000 if the student took STAT 35500 (grade requirement needs to be checked).  Mark Ward 4/3/2018
* MA 26500 (with minimum of B-) can substitute MA 35100, if taken before major (regardless of institution), also test out credit allowed if taken before major or by the 1st week of the student’s first semester at Purdue West Lafayette (more suitable for transfer students that have undistributed credit in this area). (Tom Sellke, 5/24/19)
* MA 26600 (with minimum of B-) can substitute MA 36600, if taken before major (regardless of institution), also test out credit allowed if take before major or by the 1st week of the student’s first semester at Purdue West Lafayette (more suitable for transfer students that have undistributed credit in this area). (Tom Sellke, 5/24/19)
* CS 37300, Data Mining and Machine Learning, and CS 49000, Large Scale Data Analytics, can both be used as STAT selectives (Tom Sellke email 10/22/18)
* Applied Statistics ONLY - MA 26600 OR MA 36600 can be used for free elective, but not both courses (Tom Sellke email 1/11/19)
* IE 33600 Operations Research - Stochastic Models CANNOT be used as a STAT selective (Sellke email 2/8/19)
* MA 35100 can be at a C- or better to meet degree requirements.  Exceptions can be added to MyPurduePlan to allow for a C- in MA 35100 in older plans of study. (Sellke, 5/18/20)
* MGMT 30500 can be used in place of STAT 35000 for the major (CoS requirement must be approved by Cos) - (Sellke, 11/30/2020)
* STAT 22500 cannot be used for a STAT major - students must take MA/STAT 41600 or graduate level version - (Sellke, 11/30/2020)
* STAT 34500, taken at a regional campus PNW can substitute for STAT 35000 - (Sellke, 11/10/2021)
* One 3 credit combination of the courses below can be used to meet one STAT Selective (Sellke, Ward 3/4/2021).
	+ STAT 19000 Data Mine I and II

	STAT 29000 Data Mine III and IV

	STAT 39000 Data Mine V and VI

	STAT 49000 Data Mine VII and VIII

Statistics Honors - STHO

* Statistics Honors students need to complete three of the following five courses with a 3.50 GPA among the three: MA 44000, MA 44200, MA 45000, STAT 51600, STAT 51700.
* STAT 51900 can replace STAT 51600 and STAT 52800 can replace STAT 51700. 516 and 517 are intended for M.A. students, whereas 519 and 528 are intended for Ph.D. students and are significantly more challenging. (Mark Ward 2/27/18)
* STHO is the honors alternative only for the STMA major. STAP does not have an honors option.

STAT Course Substitutions

* The Following are approved substitutions for requirement ONLY (not GPA)

|  |  |
| --- | --- |
| Original course(s): | Can be Substituted by: |
| STAT 30100 | STAT 30500, 50100, 50300, 35000, 43300, 51100 |
| STAT 30500 | STAT 30100, 50100, 50300, 35000, 43300, 51100 |
| STAT 50100 | STAT 50300, 35000, 43300, 51100 |
| STAT 50300 | STAT 35000, 43300, STAT 51100 |
| STAT 35000 | STAT 43300, 51100 |
| STAT 43300 | STAT 35000, 51100 |
| STAT 51100 | STAT 43300, 35000 |
| STAT 22500 | STAT 31100, 41600, 51600 |
| STAT 31100 | STAT 41600, 51600 |
| STAT 41600 | STAT 51600, STAT 51900 |

STAT Minor

* For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, STAT 35000, STAT 35500, STAT 50100, and in no more than one of STAT 50300 and 51100.  Courses will not exclude each other in the GPA, but cannot count toward the 120 credits for graduation.
* STAT 301 can be substituted for STAT 350 under the following three conditions:
	+ Grade in STAT 30100 is A
	+ Grade in STAT 41600 (or 22500 or 31100) is B
	+ Grade in STAT 41700 is B
* CHE 32000 used BY PERMISSION only on a case-by-case basis
* IE 5300 considered a “STAT” course because cross-listed with STAT 51300 (Ward, 12/3/12)
* Big Data Analysis STAT 29000 (3 credits) can be used as a STAT Selective for all degrees. (Ward 10-6-14)
* ECE/EE 30200 instead of STAT 22500 for MINOR ONLY:  Ward 2/13/15
* Statistics 490D: Experimental Design for Causal Inference is approve STAT Selective for major and minor: Ward 4/12/15
* MA 49000 Elementary Stochastic Processes – can be used as a STAT Selective (Ward 10/14/15)
* If a student took both STAT 22500 or IE 23000 or IE 33000 and STAT/MA 41600  they can use STAT 22500 or IE 23000 or IE 33000 for Area 1 and STAT/MA 41600 for Area 2.  These courses are duplicate in nature , but it was not explicitly stated on the minor sheet.   This policy is only for catalog terms PRIOR to Fall 2016 and students should be encouraged to take AREA 3 courses that are not probability.  (Ward, 3/14/2018)
	+ ~~For Minor only, both STAT 31100 and STAT 41600 may be used~~
		- Policy Expired Summer 2106
	+ ~~Can use both STAT 4160000 and IE 23000 (Ward, 7/7/14)~~
		- Policy Expired Summer 2106
* Pass/No Pass option is not recommended for the minor, but if a student asks for an exception due to extenuating circumstances, the request should go to the Undergraduate Statistics Chair for review.  (Ward, 3/8/18)
* Applied Statistics, Statistics with Math, Actuarial Science, Actuarial Science Honors, Mathematical Statistics, Statistics Honors, and Data Science (both from CS and STAT Departments) are not allowed to pursue a STAT minor.  If a math department major has an interested in a STAT minor, check the requirements for earning STMA/MASI as it may be the same course work.
* CS 37300 is Data Mining and Machine Learning can be used for a STAT Selective for the STAT minor (Sellke, 2/14/2019)
* CS 49000 LSDA is Large Scale Data Analytics can be used for a STAT Selective for the STAT minor (Sellke, 2/14/2019)
* MGMT 30500 and IE 23000/33000 must be at a B- or better for minor in order to meet the pre-requisites for other minor courses.

ADVISING PRACTICE

* Any BIOL/EAPS (except those similar to the Biology listed on the No-Credit list – like anatomy) undistributed transfer credit can be substituted for credit toward graduation unless advisor suspects duplication in taking a Purdue course.  Watch for possible duplicate credit.
* Any MA/STAT/CHM undistributed transfer credit must be evaluated to use for credit. Watch for possible duplicate credit.
* PHYS undistributed credit cannot be used.
* For CODO and Dual Major students:  We PREFER MA 16100 and MA 16200, but if the student is confident in their calculus, they could to MA 16010 + MA 16020 = MA 16100 and then take MA 16200.  It is not preferred, but some students do opt for this so they do not lose their MA 16010 credit.  We always go over with them that MA 16100 is the better background for MA 16200, but it is their choice.

**MGMT Minor Policy**

Students who are majoring in Actuarial Science and Applied Statistics with a MGMT minor who near graduation decide to not finish Actuarial Science (due to GPA or other reasons) can finish the MGMT minor per Abbey Wolfman e-mail 2/21/2019.  Procedure Below:

1. If it is before the student's final semester, remove the MGMT minor from the Actuarial Science major and add it to the Applied Statistics major with the CATALOG TERM Fall 2018.
2. If it is the student's final semester, work with the graduate coordinator to accomplish #1
3. E-mail the Director of Advising in Krannert to have the exception entered to use MGMT 41100 in the minor

**Directions for students wishing to take a course during their undergraduate designated as “Available for Graduate Credit” on transcript.**

1. Only 6 credits recommended (most that most graduate school will accept) and grade of A or B.  Purdue limits this to 12 credits.
2. The course cannot be used for any of the student's undergraduate degree (even free elective) unless it is a pre-approved program (some Krannert programs have allowed dual use and it is pre-approved)
3. The academic advisor shall  complete the Academic Record Change (Registrar Form 350), which indicates that the course may be used for graduate credit, and submit the form to the registrar, along with the grade reported, at the close of the student’s final term.  The academic advisor’s signature will attest to the fact that the credit is in excess of that required for the baccalaureate degree so that the registrar can then enter the notation “available for graduate credit” on the student’s record.

ARCHIVED POLICY

* Selective Courses for MATH, MAHO, MACS, MASI:
	+ MA 490 Intro to Computational Neuroscience
	+ MA 490 Computational Cell Biology
	+ MA 490 Cardiac Modeling
* MA 37300 was a  4 credit hours course—older versions were MA 370 and MA 490A.
* STAT 420 –Time Series was previously STAT 490T.
* STAT 47201 - Older versions were STAT 49000—Actuarial Models I (4 cr hrs) and STAT 47200 Actuarial Models I (3 credits).  STAT 47200 Actuarial Models I (3 cr.) was substituted with STAT 49000 Actuarial Models I (4 crs) which was given the permanent number of STAT 47201 (4 cr.)  Actuarial Models- Life Contingencies.  The last substitution was effective Fall 2013.
* STAT 47301  -  Older versions were STAT 47300—Actuarial Models II (3 credits) and STAT 47301 for 3 credits.  STAT 47300 Actuarial Models II (3 cr.) was substituted by STAT 47301 (3 cr.)  Introduction To Arbitrage-Free Pricing Of Financial Derivatives in Spring 2013.
* MA 290H (5 credits) MA 290H = MA 36600 + MA 35100.
* MABU -
* HONR 39900 Probability: The Science of Uncertainty taught in Fall 2010 can be used as MA/STAT 41600 (Ward, 3/22/10)(Walther, 8/21/15)
* For MAED:  STAT 35000 meets a CoS requirement in 2007 curriculum and fulfills the Stat/Math/CS selective for “old” curriculum
* STAT 420 –Time Series was previously STAT 490T prior to Spring 2008.
* STAT 479—Loss Models was previously STAT 490C.
* STAT 433, 305, and 474 are dormant
* HONR 399, Probability: The Science of Uncertainty taught in Fall 2010 can be used the same as MA/STAT 41600 (Mark Ward 3/22/10)