

2+2 ECONOMICS Plan requirements, course sequencing, and offerings

The official plan requirements are in the Undergraduate Calendar. In case of any discrepancies with this document the Senate approved calendar version is binding.

General Requirements for the BA

- Credit for a minimum of 40 courses (20 credits) of which 20 courses (10 credits) have to be from the University of Waterloo with a grade.
- A minimum average of all grades at Waterloo of 60%.
- Arts Breadth requirements:
 - 2 Econ courses and 2 courses with a ANTH, PSCI, PSYCH, SDS, SOC label
 - 1 course in DAC, DRAMA, FINE, MUSIC, SPCOM, VCULT
 - 2 courses with a CLAS, ENGL, HIST, MEDVL, PHIL, RS label
 - 2 courses with a ASL, CHINA, CROAT, DUTCH, EASIA, FR, GER, GRK, ITAL, ITALST, JAPAN, JS, KOREA, LAT, PORT, REES, RUSS, SI, SPAN or LANG label
 - 1 course in another discipline in Arts not in the above lists, or from a different faculty (in practice any MATH, CS, STAT will satisfy this.) Note that ARTS 130, 140 and any EMLS course do not count towards this. If in doubt, ask an advisor!
- **Communication Skills requirement: (NOTE: this differs from the Calendar copy but in this one case what is written here is the correct requirement and the calendar does not apply):** A passing grade ($\geq 50\%$) in any EMLS course. Ideally in the first fall term at Waterloo. Not later than in the second term at Waterloo. This is a “special rule” for Arts 2+2 students.

Honours Economics requirements

- A minimum of 16 courses (8 credits) with the ECON label.
- A minimum of 8 courses (4 credits) of ECON courses with grades from Waterloo.
- A minimum average in all Waterloo ECON courses of 70%.
- Credit for (note: Econ 201 does not count towards ECON course totals!)

Intro	Quant	Theory	Macro	Econometrics	Electives
101, 102	211, 221	290, 391, 393	306, one of 406/7/8/9	322, 323	Two 400 level Three any level

Honours Economics – Intensive Specialization requirements

- A minimum of 21 courses (10.5 credits) with the ECON label.
- A minimum of 11 courses (5.5 credits) of ECON courses with grades from Waterloo.
- A minimum average in all Waterloo ECON courses of 75%.
- Credit for (note: Econ 201 does not count towards ECON course totals)

Intro	Quant	Theory	Macro	E'metrics	Advanced	Essay	Electives
101, 102	211, 221	290, 391 392, 393	306, one of 406/7/8/9	322, 323 421	491 496	472	Two 400 level Three any level

Honours Mathematical Economics requirements

- A minimum of 16 courses (8 credits) with the ECON label.
- A minimum of 8 courses (4 credits) of ECON courses with grades from Waterloo.
- A minimum average of all Waterloo ECON courses of 70%.
- Credit for (note: Econ 201, 211, 221 do not count towards ECON course totals)

Intro	Theory	Macro	Advanced	Essay/ Research	Electives
101, 102	290, 391 392, 393	306, one of 406/7/8/9	491 (micro) 496 (macro)	472	Two 400 level Three any level

- A minimum of 13 courses (6.5 credits) with the faculty of Mathematics. (note: BUS, COMM, MATBUS, MTHEL do not count:)
- A minimum of 7 courses (3.5 credits) in Mathematics with grades from Waterloo.
- A minimum average of all Waterloo Math faculty courses of 60%.
- Credit for:

Calculus	Linear Algebra	Prob/Stats	CS	CO, AMATH	Elect
MATH 127/137	Math 106/136	STAT 220/230	CS 115/135	CO 227/250	One, any level
MATH 128/138	Math 225/235	Stat 221/231	CS 116/136	AMATH 250/350	
MATH 207/237		Stat 321/331			

Note: courses in Math have “general/science”, “math honours”, and “advanced” level. In practice students are usually restricted to the first two, so only those are listed here.

Econ Core Course Dependencies: all core courses require either {Econ 211 and 221} OR {Calculus 1 and 2 and Probability} first. After that the sequences are

Theory:	→ 290 → 391 → 393 → 491 → 290 → 392 → 491
Macro:	→ {290 → 391} → 306 → 406/7/8/9 → 306 → 496
Econometrics:	→ 322 → 323 → 421, 422, 423

Econ Core Course Offerings:

Fall	Winter	Spring
211, 221	211, 221	211, 221
290, 391, 392, 393	290, 391, 392, 393	290, 393
306, at least one of 406/7/8/9	306, at least one of 406/7/8/9	306
322, 323, 421, 422 or 423	322, 323, 421, 422 or 423	322
491, 472	496, 472	

Note: various electives are offered, predominantly in Fall and Winter terms.

Math Course Sequences: Simplified (omitting advanced courses (and %grade reqs))

Calc:	1{2 3}7 → 1{2 3}8 → 2{0 3}7
Linear:	1{0 3}6 → 2{2 3}5
Stats:	Math 128 → Stat 2{2 3}0 → Stat 2{2 3}1 → Stat 321
Amath :	{Math 128, Math 106 } → AMATH {2 3}50
CO:	Math 1{0 3}6 → CO 227
CS:	CS 115 → CS116

Math Econ Core Offerings: omitting advanced courses; NOTE STAT 321 is Winter only

Fall	Winter	Spring
MATH 106, 127, 128, 136, 137, 138, 207, 225, 235, 237 STAT 220, 221, 231, 331 AMATH 250, 350 CO 227, 250 CS 115, 116, 135, 136	MATH 106, 127, 128, 136, 137, 138, 207, 225, 235, 237 STAT 220, 221, 231, 321 , 331 AMATH 250, 350 CO 227, 250 CS 115, 116, 135, 136	MATH 106, 127, 128, 136, 137, 138, 207, 225, 235, 237 STAT 231, 331 AMATH 250 CO 250 CS 115, 116, 136

Standard Semester Course Plans:

Note that Econ 322 can be postponed one term (323 then in second fall.) Econ 290 MUST be first Fall.

Economics Honours Core Course schedule: (Spring off)

Term 1: Fall	Econ 290	Econ 322			
Term 2: Winter	Econ 391	Econ 323			
Spring					
Term 3: Fall	Econ 306	Econ 393			
Term 4: Winter	Econ 406 7 8 9	Econ 4xx	Econ 4xx		

Economics Honours Core Course schedule: (academic Spring)

Term 1: Fall	Econ 290	Econ 322			
Term 2: Winter	Econ 391	Econ 323			
Term 3 Spring	Econ 306	Econ 393			
Term 3: Fall	Econ 406/7/8/9	Econ 4xx			
Term 4: Winter	Econ 4xx				

Economics Intensive Honours Core Course schedule:

Term 1: Fall	Econ 290	Econ 322			
Term 2: Winter	Econ 391	Econ 323	Econ 392		
Term 3: Spring	Econ 306	Econ 393			

Term 4: Fall	Econ 406 7 8 9	Econ 491	Econ 4xx	Econ 4xx	
Term 5: Winter	Econ 496	Econ 421	Econ 472		

Mathematical Economics:

Note: access to Math faculty courses that cannot be added on Quest is via Math undergrad advising with a signature from Economics advising first. Arts students are not routinely allowed into the honours level courses, which require certain grades in prerequisites. Advanced level courses are nearly never authorized. Usually in the first courses here students are restricted to the general level. With top grades in those courses Math then usually does authorize honours level courses as a follow up.

Econ Core Course schedule: most math courses are available most terms; exceptions noted. Given the various transfer credits no complete Math faculty sequence is provided. Fit courses in sequence according to schedule of offerings and transfer credits obtained.

Term 1: Fall	Econ 290		Stat 2{2 3}1		
Term 2: Winter	Econ 391	Econ 392	STAT 321		
Term 3: Spring	Econ 306	Econ 393			
Term 4: Fall	Econ 406 7 8 9	Econ 491	Econ 4xx		
Term 5: Winter	Econ 496	Econ 472	Econ 4xx		

Notes:

- STAT 321 is only offered in Winter terms. It can be taken in the last winter BUT Econ 472 usually involves writing an econometrics paper and STAT 321 is nearly essential to do well in that. If transfer credit for Stat 221 or 231 is not present they must be taken in the first Fall term.
- CO 227 is not offered in Spring term.