



ESSC Academic Counselling

For 2020 Admission

25 AUG 2020



Tiffany PANG

Yr. 3 / Atmospheric Science
Morningside College

Minor: Linguistics (HKSL stream)

Dickson WONG

Yr. 3 / Geophysics
Chung Chi College

Minor: German

“

What is ESSC?



What is ESSC?

- Earth Systems
- Interactions among atmosphere, hydrosphere, cryosphere, geosphere and biosphere.
- Geology, geophysics
- Meteorology
- Oceanography
- Environmental chemistry
- Quantitative skills



Declare major (JS4601)

Students admitted via [SCIENCE Broad-based Admission Scheme](#) can declare major at any of the three phases and admission is guaranteed.

Phase I: Entry

Obtained Level 5 or above in a HKDSE subject specified by the potential major programme

OR

Granted course exemption for the course specified by the potential major programme for major declaration in Phase II

OR

Obtained 88% or above in JEE total score

Phase II: End of Year 1

Obtained C+ or above in ONE course from the Faculty Package specified by the potential major programme

OR

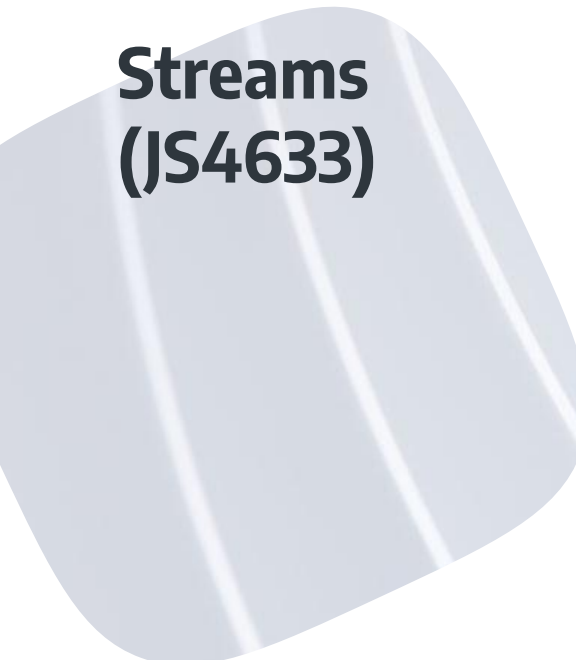
TAKEN (NOT necessarily ALL PASSED) a set of courses specified by the potential major programme in Phase III (for students admitted with Advanced Standing only)

Phase III: End of Year 2

TAKEN (NOT necessarily ALL PASSED) a set of courses specified by the potential major programme


Earth System
Science

- Chemistry or
- Physics or
- Combined Science or
- Mathematics (Module 1) or
- Mathematics (Module 2)



Streams (JS4633)

- **MUST** select stream at the end of Y1 (Jul 2021)
 - May switch/ opt out at Y2+
- **Atmospheric Science/ Geophysics**
 - Integrated learning package
 - Different major requirements in terms of course combinations
- No strong interest on either side may opt out (**General stream**)



About ESSC streams

Atmospheric Science

- Study of the atmosphere's dynamics, chemistry, and climate
- **Quantitative** understanding of the **atmosphere** by models, numbers and physics

Geophysics

- Studying earth using gravity, magnetic, electrical and seismic methods
- **Quantitative** understanding of the **solid earth**: structures, dynamics, geohazards and natural resources

Why choosing streams (or why not?)

- Major concentration
 - For **interest** / Integrated learning package
 - Will be printed on transcripts & letter of certification
- Minor declaration
 - Physics minor with 1-2 additional courses
- Career prospect
 - Acquire some important skills (mostly quantitative)
- **Physics** + maths (calculus) + programming are **important** in both streams

General stream may offer a greater **flexibility** who wish to explore more in other sciences, such as chemistry, biology, statistics, environmental science etc.

Course Planning

- PLAN WISELY
&
Check course AVAILABILITY

Sem 1 (Fall) or
Sem 2 (Spring) !!!

- Normally max **18 credits available each semester**
- Major requirements: **72 credits**
 - Most course in 3 credits
 - Most courses have **prerequisites**
 - Start 3000- level courses in Y2, 4000- level in Y3
 - **Most 4000- level courses only open bi-yearly**
 - Average major course-load per year
 - $72 \div 4 = 18$ credits ; 6 courses
- Common core : 39 credits (including GE)
- Free electives/ Minors
- Graduation requirement : 123 credits

ESSC required courses highlighted

(Both streams)

(Geophysics)

(Atmospheric Science)

| Course List | | |
|-------------|--|---------|
| Course Code | Course Title | Unit(s) |
| ESSC1000 | Exploring the Earth System | 1 |
| ESSC2010 | Solid Earth Dynamics | 3 |
| ESSC2020 | Climate System Dynamics | 3 |
| ESSC2110 | Geoscience Field Study | 1 |
| ESSC2120 | Integrated Geoscience Field Study | 2 |
| ESSC2130 | Fundamental Geoscience Fieldwork | 3 |
| ESSC2800 | Introduction to Environmental Engineering | 3 |
| ESSC3100 | Structural Geology | 3 |
| ESSC3110 | Geoscience Field Course | 3 |
| ESSC3120 | Physics of the Earth | 3 |
| ESSC3200 | Atmospheric Dynamics | 3 |
| ESSC3220 | Atmospheric Chemistry | 3 |
| ESSC3300 | Ocean and Climate | 3 |
| ESSC3320 | Hydrogeology | 3 |
| ESSC3600 | Ecosystems and Climate | 3 |
| ESSC3601 | Principles of Ecosystems and Climate | 2 |
| ESSC3800 | Global Environmental Change | 3 |
| ESSC3900 | Internship | 3 |
| ESSC4010 | Solid and Fluid Mechanics | 3 |
| ESSC4110 | Applied Geophysics | 3 |
| ESSC4120 | Petrology | 3 |
| ESSC4130 | Geomorphology | 3 |
| ESSC4140 | Seismology | 3 |
| ESSC4160 | Marine Geology and Geophysics | 3 |
| ESSC4210 | Land-Atmosphere Interactions and Boundary Layer Meteorology | 3 |
| ESSC4220 | Tropical Meteorology | 3 |
| ESSC4230 | Introduction to the Physics and Chemistry of Aerosol | 3 |
| ESSC4240 | Air Pollution Science and Engineering | 3 |
| ESSC4250 | Advanced Topics in Atmospheric Dynamics | 3 |
| ESSC4260 | Urban Climatology | 3 |
| ESSC4510 | Statistical Methods and Data Analysis for Earth System Science | 3 |
| ESSC4520 | Numerical Methods and Modeling for Earth System Science | 3 |
| ESSC4540 | Remote Sensing – Principles and Applications | 3 |
| ESSC4810 | Senior Project I | 3 |
| ESSC4820 | Senior Project II | 3 |

← Foundation

↗ Intermediate

↙ Capstone Project (Final year thesis)

Difficult
&
Demanding

**Other required
courses for both
streams**

1. **Physics** Package
 - PHYS 1122 / ENGG 1310
 - PHYS 2401 / MAEG 2030 (Study after MATH 2550)
2. Intermediate Maths
 - MATH 2550 (*or others*)
3. Programming (ESSC requirement)
 - CSCI 1120, 1510, 1520, 1530, 1540 or PHYS 2061
4. Intermediate & Advanced ESSC courses
 - 2 extra 3000 level courses (AS)
 - 3 extra 3000 level courses (Geo)
 - At least 4 4000 level courses from respective streams

Faculty Package

MUST obtain B or above for an advanced level MATH course i.e. MATH 2550

DSE M2 or strong calculus background

1. Faculty Package: 9
Group C: MATH1010 (preferred) or 1520
Group D: PHYS1111 (preferred) or 1001 or 1002 or 1113
A course from the following
Group B: CHEM1070 (preferred) or 1072
Group E: STAT1011 (preferred) or 1012

2. Required Courses:
(a) Foundation Science: 3
One course from the remaining group in the Faculty Package or one course from LSCI1002 (preferred) or 1000 or 1001

Faculty Package

DSE Physics background
(With calculus background)

None/ Poor physics background

Only for physics major;
need permission for enrollment
(Content same as PHYS 1111)

1. Faculty Package: 9
Group C: MATH1010 (preferred) or 1520
Group D: PHYS1111 (preferred) or 1001 or 1002 or 1113
A course from the following
Group B: CHEM1070 (preferred) or 1072
Group E: STAT1011 (preferred) or 1012

2. Required Courses:
(a) Foundation Science: 3
One course from the remaining group in the Faculty Package or
one course from LSCI1002 (preferred) or 1000 or 1001

Faculty Package

1. Faculty Package: 9
Group C: MATH1010 (preferred) or 1520
Group D: PHYS1111 (preferred) or 1001 or 1002 or 1113
A course from the following
Group B: CHEM1070 (preferred) or 1072
Group E: STAT1011 (preferred) or 1012
2. Required Courses:
(a) Foundation Science: 3
One course from the remaining group in the Faculty Package or
one course from LSCI1002 (preferred) or 1000 or 1001

DSE Chemistry
background

No DSE chemistry
background

Faculty Package

1.

Faculty Package:

Group C: MATH1010 (preferred) or 1520

Group D: PHYS1111 (preferred) or 1001 or 1002 or 1113

A course from the following

Group B: CHEM1070 (preferred) or 1072

Group E: STAT1011 (preferred) or 1012

9

2.

Required Courses:

Choose one from STAT/ LSCI;

(STAT is more useful for quantitative analysis)

(a)

Foundation Science:

One course from the remaining group in the Faculty Package or one course from LSCI1002 (preferred) or 1000 or 1001

3

Course Schedule (For Year 1-2)

| | Sem 1 (Fall) | Sem 2 (Spring) |
|-------------------------------|--|--|
| 2000 ESSC | ESSC 1000 ; ESSC 2020 ; ESSC 2800 | ESSC 2010 |
| 3000 ESSC | ESSC 3120 ; ESSC 3200 ; ESSC 3320 ; ESSC 3800 | ESSC 3100 ; ESSC 3220 ; ESSC 3300 ; ESSC 3600 |
| Faculty package courses | Offered both semesters <i>(Please check for alternatives)</i> | Offered both semesters <i>(Please check for alternatives)</i> |
| PHYS / <i>Alternatives</i> | PHYS 2041 ; PHYS 2061 | PHYS 1122 ; PHYS 2401 ; <i>ENGG 1310 ; MAEG 2030</i> |
| MATH | | MATH 2550 |
| CSCI | CSCI 1120 ; CSCI 1540 | CSCI 1510 ; CSCI 1520 ; CSCI 1530 |
| Languages | ELTU, Other languages (I, III, V) | CHLT, Other languages (I, II, IV) |

Example (For year 1 students)

You are strongly advised to **complete most faculty packages** and 2 required ESSC courses (**ESSC 2010/2020**) in Yr 1

| | Sem 1 (Fall) | Sem 2 (Spring) |
|---------------------|--|----------------------------------|
| ESSC | ESSC 2020 (advised) ; ESSC 1000 (optional) (1 credit) | ESSC 2010 (required) |
| Sci Fac Pack | MATH 1010 ; STAT 1011 | PHYS 1111 ; CHEM 1070 |
| Language | ELTU 1001 / 1002 (4 credits) | CHLT 1100 |
| P.E. | 1 course (1 credit) | 1 course (1 credit) |
| Foundation GE | (UGFN1000 / UGFH1000) | (UGFN1000 / UGFH1000) |
| College GE | 0-3 credits (Depends on college) | 0-3 credits (Depends on college) |
| Others | (Minor/ elective) | ENGG 1000 ; (Minor/ elective) |

Example (Tiffany)

(Bad example, should have studied ESSC2020 in Year 1, so can study 3000-level courses earlier)

| | Sem 1 | Sem 2 | Year/ Credit | Cumulative credits | 0 |
|---------|--|---------------------------------------|-----------------|-----------------------|----|
| Y1 2018 | ESSC1000 CHEM1070 STAT1011 MATH1520 | 10 ESSC2010 PHYS1111 ENSC2270 | 9 | 19 | 19 |
| Y2 2019 | ESSC3320 ESSC2020 CSCI1540 ESSC3200 ESSC4540 ESSC4260 | 9 ESSC3220 PHYS1122 MATH2550 ESSC3600 | 12 | 21 | 40 |
| Y3 2020 | ESSC3900 | 12 [Exchange] | | 12 | 52 |
| Y4 2021 | FYP ESSC4230 ESSC4XXX | 9 FYP PHYS2401 ESSC3300 MAEG2030 | 12 | 21 | 73 |
| | | | | 0 | 73 |

Example (Dickson)

(Bad example, should have studied **CHEM 1070** in Year 1, should have studied **programming** and more ESSC courses in Year 2)

| | Sem 1 (Fall) | | Sem 2 (Spring) | | Sem 3 (Summer) | | Yr | Tt |
|------------|---|----|---|---|----------------------------|-----|----|----|
| Y1 2018 | ESSC 1000 ESSC 2020 MATH 1010 STAT 1012 | 10 | ESSC 2010 PHYS 1111 | 6 | ESSC 2120 | 2 | 18 | 18 |
| Y2 2019 | ESSC 3120 ESSC 3320 | 6 | ESSC 3100 MATH 2550 | 6 | | | 12 | 30 |
| Y3 2020 | ESSC 4130 ESSC 4540 PHYS 2061 | 9 | EXCHANGE | | | | 9 | 39 |
| Y4 2021 | ESSC 3800 ESSC 4110 ESSC 4820 | 9 | ESSC 3220 ESSC 4140 CHEM 1070 | 9 | (ESSC 3110) (ESSC 4160) | (6) | 18 | 57 |
| Y5 2022 | ESSC 4810 PHYS 2041 | 6 | ESSC 4820 PHYS 1122 PHYS 2401 | 9 | | | 15 | 72 |

Example (Tiffany)

| Time | Monday 10 Sep | Tuesday 11 Sep | Wednesday 12 Sep | Thursday 13 Sep | Friday 14 Sep |
|-------|------------------|--|--|--|---|
| 08:00 | | | | | |
| 09:00 | | | | | |
| 10:00 | | | MATH 1520 - B Lecture 10:30 - 11:15 Yasumoto Int'l Acad Park LT5 | MATH 1520 - B Lecture 10:30 - 12:15 Yasumoto Int'l Acad Park LT8 | |
| 11:00 | | ESSC 1000 - - Lecture 11:30 - 12:15 Science Centre L2 | | | |
| 12:00 | | PHED 1028 - D Lecture 12:30 - 14:15 United College Gymnasium | | MATH 1520 - BT02 Interactive Tutorial 12:30 - 13:15 Yasumoto Int'l Acad Park LT8 | GEMC 1001 - -T06 Interactive Tutorial 12:30 - 14:15 Morningside College Room 1 S3 |
| 13:00 | | | | | |
| 14:00 | | | | | |
| 15:00 | | HKSL 1000 - DC01 Classwork 14:30 - 17:15 William M W Mong Eng Bldg 408 | STAT 1011 - - Lecture 14:30 - 17:15 Yasumoto Int'l Acad Park LT3 | LING 1000 - - Lecture 14:30 - 16:15 Yasumoto Int'l Acad Park LT5 | GEMC 1001 - - Lecture 14:30 - 16:15 Mong Man Wai Bldg LT2 |
| 16:00 | | | | LING 1000 - -T02 Interactive Tutorial 16:30 - 17:15 Yasumoto Int'l Acad Park 511 | |
| 17:00 | | | | | |
| 18:00 | | | | | |

| Time | Monday 4 Feb | Tuesday 5 Feb | Wednesday 6 Feb | Thursday 7 Feb | Friday 8 Feb |
|-------|---|--|--|--|---|
| 08:00 | | | | | |
| 09:00 | | | | UGEA 2148 - -D01 Discussion 09:30 - 10:15 Hui Yeung Shing Bldg 101 | ENSC 2270 - - Lecture 08:30 - 11:15 Lee Shau Kee Building LT4 |
| 10:00 | | UGFN 1000 - BT01 Interactive Tutorial 09:30 - 11:15 Chen Kou Bun Bldg 706C | UGEA 2148 - -D01 Discussion 09:30 - 10:15 Hui Yeung Shing Bldg 101 | ESSC 2010 - - Lecture 09:30 - 10:15 Mong Man Wai Bldg 710 | |
| 11:00 | | | | ESSC 2010 - -T01 Interactive Tutorial 10:30 - 11:15 Mong Man Wai Bldg 710 | |
| 12:00 | UGEA 2148 - - Lecture 11:30 - 13:15 Esther Lee Bldg 403 | PHYS 1111 - B Lecture 11:30 - 13:15 Science Centre L5 | | | |
| 13:00 | PHYS 1111 - BE01 Exercise 13:30 - 14:15 Wu Ho Man Yuen Bldg 501 | | | | |
| 14:00 | | ESSC 2010 - - Lecture 13:30 - 15:15 Lady Shaw Bldg C2 | | PHYS 1111 - B Lecture 14:30 - 15:15 Yasumoto Int'l Acad Park LT3 | UGFN 1000 - B Lecture 14:30 - 15:15 Wong Foo Yuan Bldg LT4 |
| 15:00 | | | HKSL 2000 - CC01 Classwork 14:30 - 17:15 Wu Ho Man Yuen Bldg 406 | PHYS 1111 - BT01 Interactive Tutorial 15:30 - 16:15 Yasumoto Int'l Acad Park LT3 | |
| 16:00 | | | | | |
| 17:00 | | | | | |
| 18:00 | | | | | |

Example (Dickson)

| Time | Monday 3 Sep | Tuesday 4 Sep | Wednesday 5 Sep | Thursday 6 Sep | Friday 7 Sep |
|-------|---|---|---|--|---|
| 08:30 | | | | | |
| 09:30 | | | | | |
| 10:30 | | PHED 1041 - F Lecture 10:30 - 11:15 University Gymnasium | | PHED 1041 - F Lecture 10:30 - 11:15 University Gymnasium | |
| 11:30 | | ESSC 1000 - - Lecture 11:30 - 12:15 Science Centre L2 | STAT 1012 - - Lecture 11:30 - 12:15 Yasumoto Int'l Acad Park LT5 | | GECC 1000 - AA01 Assembly 11:30 - 13:15 Chung Chi College Chapel |
| 12:30 | MATH 1010 - G Lecture 12:30 - 14:15 Yasumoto Int'l Acad Park LT7 | | MATH 1010 - G Lecture 12:30 - 13:15 Wu Ho Man Yuen Bldg 507 | | |
| 13:30 | | | | | |
| 14:30 | ESSC 2020 - - Lecture 14:30 - 16:15 Lady Shaw Bldg LT2 | GERM 1000 - FC01 Classwork 14:30 - 17:15 Lady Shaw Bldg C5 | ESSC 2020 - - Lecture 14:30 - 15:15 Lady Shaw Bldg LT2 | | GECC 1130 - - Lecture 14:30 - 16:15 Chung Chi College Chapel |
| 15:30 | | | ESSC 2020 - -T01 Interactive Tutorial 15:30 - 16:15 Lady Shaw Bldg LT2 | | |
| 16:30 | STAT 1012 - - Lecture 16:30 - 18:15 Yasumoto Int'l Acad Park LT5 | | | | GECC 1131 - AMD1 Discussion 16:30 - 18:15 Esther Lee Bldg 205 |
| 17:30 | | | | MATH 1010 - GT01 Interactive Tutorial 17:30 - 18:15 Wu Ho Man Yuen Bldg 301 | |

| Time | Monday 7 Jan | Tuesday 8 Jan | Wednesday 9 Jan | Thursday 10 Jan | Friday 11 Jan |
|-------|--|---|---|---|---|
| 08:30 | | | | | |
| 09:30 | CHLT 1100 - PG Lecture 08:30 - 11:15 Yasumoto Int'l Acad Park 509 | PHED 1031 - A Lecture 08:30 - 10:15 Tennis Court # 3, 4, 5 | | ESSC 2010 - - Lecture 09:30 - 10:15 Mong Man Wai Bldg 710 | |
| 10:30 | | | | ESSC 2010 - -T01 Interactive Tutorial 10:30 - 11:15 Mong Man Wai Bldg 710 | |
| 11:30 | | | | | GECC 1000 - AA01 Assembly 11:30 - 13:15 Chung Chi College Chapel |
| 12:30 | ENGG 1000 - AE Lecture 12:30 - 13:15 Yasumoto Int'l Acad Park 403 | PHYS 1111 - B Lecture 11:30 - 13:15 Science Centre L5 | | | |
| 13:30 | PHYS 1111 - BE01 Exercise 13:30 - 14:15 Wu Ho Man Yuen Bldg 501 | ESSC 2010 - - Lecture 13:30 - 15:15 Lady Shaw Bldg C2 | GERM 2000 - BC01 Classwork 13:30 - 14:15 William M W Mong Eng Bldg 402 | | |
| 14:30 | GERM 2000 - BC01 Classwork 14:30 - 16:15 T.C. Cheng Bldg 201 | | | PHYS 1111 - B Lecture 14:30 - 15:15 Yasumoto Int'l Acad Park LT3 | |
| 15:30 | | | | PHYS 1111 - BT01 Interactive Tutorial 15:30 - 16:15 Yasumoto Int'l Acad Park LT3 | |

Reminders

Credit Limit:

- 18 Creds / Semester
- 6 Creds / Summer
- 39 Creds / Year

1. Should finish **ESSC 1000, 2010 and 2020** by Year 1
2. Should finish **MOST** Faculty Packages by Year 1
3. **MUST** obtain B or above for MATH 1520
4. Should finish programming course by Year 2
5. **MUST** finish UGFH + UGFN by the end of Year 2
6. Be careful with stream requirements, course prerequisites and availability



Useful Tips

1. Check Undergraduate Handbook
 - Programme Requirement in CUSIS
 - Course list will be **updated yearly**
2. Generate customised What-if Report
 - Change / drop streams
 - Minor declaration
3. Make your own study plan with excel
4. Plan your timetable ahead of course enrolment
 - Timetable Planner in CUSIS
 - **Validate** with shopping cart in CUSIS
 - CUTS on Facebook (Unofficial)

Appendix: ESSC elective courses

(Both streams)

(Geoscience Field Trip ;
Summer only)

(Geophysics)
(Atmospheric Science)

| Course-List | | |
|-------------|--|---------|
| Course-Code | Course-Title | Unit(s) |
| ESSC1000 | Exploring the Earth System | 1 |
| ESSC2010 | Solid Earth Dynamics | 3 |
| ESSC2020 | Climate System Dynamics | 3 |
| ESSC2110 | Geoscience Field Study | 1 |
| ESSC2120 | Integrated Geoscience Field Study | 2 |
| ESSC2130 | Fundamental Geoscience Fieldwork | 3 |
| ESSC2800 | Introduction to Environmental Engineering | 3 |
| ESSC3100 | Structural Geology | 3 |
| ESSC3110 | Geoscience Field Course | 3 |
| ESSC3120 | Physics of the Earth | 3 |
| ESSC3200 | Atmospheric Dynamics | 3 |
| ESSC3220 | Atmospheric Chemistry | 3 |
| ESSC3300 | Ocean and Climate | 3 |
| ESSC3320 | Hydrogeology | 3 |
| ESSC3600 | Ecosystems and Climate | 3 |
| ESSC3601 | Principles of Ecosystems and Climate | 2 |
| ESSC3800 | Global Environmental Change | 3 |
| ESSC3900 | Internship | 3 |
| ESSC4010 | Solid and Fluid Mechanics | 3 |
| ESSC4110 | Applied Geophysics | 3 |
| ESSC4120 | Petrology | 3 |
| ESSC4130 | Geomorphology | 3 |
| ESSC4140 | Seismology | 3 |
| ESSC4160 | Marine Geology and Geophysics | 3 |
| ESSC4210 | Land-Atmosphere Interactions and Boundary Layer Meteorology | 3 |
| ESSC4220 | Tropical Meteorology | 3 |
| ESSC4230 | Introduction to the Physics and Chemistry of Aerosol | 3 |
| ESSC4240 | Air Pollution Science and Engineering | 3 |
| ESSC4250 | Advanced Topics in Atmospheric Dynamics | 3 |
| ESSC4260 | Urban Climatology | 3 |
| ESSC4510 | Statistical Methods and Data Analysis for Earth System Science | 3 |
| ESSC4520 | Numerical Methods and Modeling for Earth System Science | 3 |
| ESSC4540 | Remote Sensing -- Principles and Applications | 3 |
| ESSC4810 | Senior Project I | 3 |
| ESSC4820 | Senior Project II | 3 |

← Introductory

← Field trip

← Internship

← Mechanics

Data Processing / Modeling

←

Appendix : Course Schedule (Advanced level)

| | 2019 Fall | 2020 Spring | 2020 Fall | 2021 Spring |
|-------------------------------|--------------------------|-------------|------------------------------------|------------------------|
| Solid Earth | ESSC 4110 ; ESSC 4120 | ESSC 4140 | ESSC 4130 | |
| Atmospheric Science | ESSC 4230 | | ESSC 4210 (Summer) ESSC 4260 | ESSC 4220 ESSC 4240 |
| Mechanics | | | | ESSC 4010 (New) |
| Data processing / Modeling | | ESSC 4520 | ESSC 4540 | ESSC 4510 |
| Others | ESSC 3900 (Internship) | | | |

Appendix : Course Schedule (Summer)

| | 2019 Summer | 2020 Summer | 2021 Summer |
|--------------------------------|--------------------------------|--|-----------------------|
| Geoscience field trip | ESSC 2120 (New) ; ESSC 3110 | ESSC 2110 (Cancelled) ESSC 4160 (Cancelled) | ESSC 2120 (Tentative) |
| Atmospheric Science | | ESSC 4210 (Special arrangement) | |
| Others | ESSC 3900 (Internship) | | |
| Other geoscience field courses | ESSC 2130 (New) | | |



Appendix: GPA

CGPA: Cumulative (weighted mean) GPA

- Include **all courses** you have studied
- For applying scholarships/ exchange
-

Major GPA: (Honors) GPA

- Include all 2000+ level courses that contribute to your major requirement
- For distributing **Honors** when you graduate