# **UIC Graduation Requirements**

Integrated Science and Engineering Division - Nano Science and Engineering

(Major, Double Major, Transfer Student with a Bachelor's Degree, Minor)

#### 1. Major Graduation Requirements (The same rule applies to General Transfer Students)

| 0-4        |       | 2014   |                      | 2015, 2016   |                  | 2017   |                  | 2018, 2019   |                  |
|------------|-------|--|----------------------|--|------------------|--|------------------|--|------------------|
| Catego     | ory   | Course   | Credit               | Course   | Credit           | Course   | Credit           | Course   | Credit           |
|            |       | Chapel   | 4P(2P) <sup>1)</sup> | Chapel   | 2 <sup>1)</sup>  | Chapel   | 2 <sup>1)</sup>  | Chapel   | 2 <sup>1)</sup>  |
|            | сс    | Understanding Christianity   | 3                    | Understanding Christianity   | 3                | Understanding Christianity   | 3                | Understanding Christianity   | 3                |
|            |       | Freshman Writing Intensive Seminar   | 3                    | Freshman Writing Intensive Seminar   | 3                | Freshman Writing Intensive Seminar   | 3                | Freshman Writing Intensive Seminar   | 3                |
|            |       | CC L-H-P Series  | 3                    | CC L-H-P Series  | 3                | CC L-H-P Series  | 3                | CC L-H-P Series  | 3                |
|            |       | Critical Reasoning or Research Design and Quantitative Methods   | 3                    | Critical Reasoning or Research Design and Quantitative Methods   | 3                | Critical Reasoning or Research Design and Quantitative Methods   | 3                | Critical Reasoning or Research Design and Quantitative Methods   | 3                |
| Common     |       | UIC Seminars   | 6                    | UIC Seminars   | 6                | UIC Seminars   | 6                | UIC Seminars   | 6                |
| Curriculum |       | Western Civilization or Eastern Civilization   | 3                    | Western Civilization or Eastern Civilization   | 3                | Western Civilization or Eastern Civilization   | 3                | Western Civilization or Eastern Civilization   | 3                |
|            |       | Holistic Education I, II, III  | 2 <sup>3)</sup>      | Holistic Education I, II, III  | 2 <sup>3)</sup>  | Holistic Education I, II, III  | 2 <sup>3)</sup>  | Social Engagement  | 1                |
|            |       | Yonsei RC101   | 1                    | Yonsei RC101   | 1                | Yonsei RC101   | 1                | Yonsei RC101   | 1                |
|            | UICE  | Calculus and Vector Analysis I, II<br>General Biology and Laboratory I, II<br>General Chemistry and Laboratory I, II<br>General Physics and Laboratory I, II | 18 <sup>4)</sup>     | Calculus and Vector Analysis I, II<br>General Biology and Laboratory I, II<br>General Chemistry and Laboratory I, II<br>General Physics and Laboratory I, II | 18 <sup>4)</sup> | Calculus and Vector Analysis I, II<br>General Biology and Laboratory I, II<br>General Chemistry and Laboratory I, II<br>General Physics and Laboratory I, II | 18 <sup>4)</sup> | Calculus and Vector Analysis I, II<br>General Biology and Laboratory I, II<br>General Chemistry and Laboratory I, II<br>General Physics and Laboratory I, II | 18 <sup>4)</sup> |
|            |       | Subtotal   | 42                   | Subtotal   | 44               | Subtotal   | 44               | Subtotal   | 43               |
|            | МВ    |  |                      |  |                  | Introduction to Integrated Science and Engineering   | 3                | Introduction to Integrated Science and Engineering   | 3                |
|            |       |  |                      |  |                  | Fundamentals of Quantum Physics  | 3                | Fundamentals of Quantum Physics  | 3                |
|            |       |  |                      |  |                  | Physical Chemistry(1)  | 3                | Physical Chemistry(1)  | 3                |
|            | MR    | Fundamentals of Quantum Physics  | 3                    | Fundamentals of Quantum Physics  | 3                | Introduction to Nanotechnology and Laboratory  | 3                | Introduction to Nanotechnology and Laboratory  | 3                |
|            | ľ     | Introduction to Nanotechnology and Laboratory  | 3                    | Introduction to Nanotechnology and Laboratory  | 3                | Nano-characterization  | 3                | Nano-characterization  | 3                |
| Major      |       | Nano-characterization  | 3                    | Nano-characterization  | 3                | Electromagnetic Theory   | 3                | Electromagnetic Theory   | 3                |
|            |       | Electromagnetic Theory   | 3                    | Electromagnetic Theory   | 3                | Solid State Chemistry  | 3                | Solid State Chemistry  | 3                |
|            | ľ     | Solid State Chemistry  | 3                    | Solid State Chemistry  | 3                | Junior Independent Study   | 3                | Junior Independent Study   | 3                |
|            | ľ     | Physical Chemistry(1)  | 3                    | Physical Chemistry(1)  | 3                | NSE Senior Thesis  | 3                | NSE Senior Thesis  | 3                |
|            | ME    |  | 39                   |  | 39               |  | 30               |  | 30               |
|            |       | Subtotal   | 57                   | Subtotal   | 57               | Subtotal   | 57               | Subtotal   | 57               |
| Total Cre  | edits | 135  |                      | 135  |                  | 135  |                  | 135  |                  |

<sup>1).</sup> Transfer students admitted to sophomore year must earn 3 Passes. Transfer students admitted to junior year must earn 2 Passes.

<sup>2).</sup> Required major credits will be reduced to 36 if a student completes a double major.

<sup>3).</sup> Select 2 categories out of 3 categories.

<sup>4).</sup> Select 6 courses out of 8 courses.

<sup>5).</sup> General transfer students get an exemption for Holistic Education and Yonsei RC101 courses.

<sup>6).</sup> Up to 4 courses from other majors listed on the UIC website can be recognized as NSE major for students who completed them by the end of the Fall 2019 semester.

# 2. Double Major Graduation Requirements

| 구분                   | ΖН   | 2014 ~ 2016   | 2017 ~ <mark>2021</mark> |  |                  |
|----------------------|------|---|--------------------------|--|------------------|
| TE                   | 종별   | Course  | Credit                   | Course   | Credit           |
|                      | MB   |   |                          | Introduction to Integrated Science and Engineering   | 3                |
|                      |      |   |                          | Fundamentals of Quantum Physics  | 3                |
|                      |      |   |                          | Physical Chemistry(1)  | 3                |
|                      | MR   | Fundamentals of Quantum Physics   | 3                        | Introduction to Nanotechnology and Laboratory  | 3                |
|                      |      | Introduction to Nanotechnology and Laboratory   | 3                        | Nano-characterization  | 3                |
| Major                |      | Nano-characterization   | 3                        | Electromagnetic Theory   | 3                |
|                      |      | Electromagnetic Theory  | 3                        | Solid State Chemistry  | 3                |
|                      |      | Solid State Chemistry   | 3                        | Junior Independent Study   | 3                |
|                      |      | Physical Chemistry(1)   | 3                        | NSE Senior Thesis  | 3                |
|                      | ME   |   | 18                       |  | 9                |
|                      |      | Subtotal  | 36                       | Subtotal   | 36               |
| Common<br>Curriculum | UICE | Calculus and Vector Analysis I, II General Biology and Laboratory I, II General Chemistry and Laboratory I, II General Physics and Laboratory I, II |                          | Calculus and Vector Analysis I, II<br>General Biology and Laboratory I, II<br>General Chemistry and Laboratory I, II<br>General Physics and Laboratory I, II | 18 <sup>2)</sup> |
|                      |      | Subtotal  | 18                       | Subtotal   | 18               |
| Total Cre            | dits | 54  |                          | 54   |                  |

<sup>1.</sup> Only UIC students can apply for a double major within UIC major offerings.

<sup>2.</sup> Select 6 courses out of 8 courses.

<sup>3.</sup> For common curriculum requirements, students having a double (2nd) major should follow the CC requirements of their 1st major.

# 3. Graduation Requirements for Transfer Students with a Bachelor's Deg

| 구분               | 종별  | 2014 ~ 2016                                   |        | 2017 ~ <mark>2021</mark>                           |        |  |
|------------------|-----|---|--------|--|--------|--|
| TE               | 0 2 | Course  | Credit | Course   | Credit |  |
|                  | МВ  |   |        | Introduction to Integrated Science and Engineering | 3      |  |
|                  |     |   |        | Fundamentals of Quantum Physics                    | 3      |  |
|                  |     |   |        | Physical Chemistry(1)                              | 3      |  |
|                  | MR  | Fundamentals of Quantum Physics               | 3      | Introduction to Nanotechnology and Laboratory      | 3      |  |
|                  |     | Introduction to Nanotechnology and Laboratory | 3      | Nano-characterization                              | 3      |  |
| Major            |     | Nano-characterization                         | 3      | Electromagnetic Theory                             | 3      |  |
|                  |     | Electromagnetic Theory                        | 3      | Solid State Chemistry                              | 3      |  |
|                  |     | Solid State Chemistry                         | 3      | Junior Independent Study                           | 3      |  |
|                  |     | Physical Chemistry(1)                         | 3      | NSE Senior Thesis                                  | 3      |  |
|                  | ME  |   | 39     |  | 30     |  |
|                  |     | Subtotal                                      | 57     | Subtotal   | 57     |  |
| Total Credits 57 |     | 57  |        |  |        |  |

<sup>1.</sup> Transfer students with a bachelor's degree are required to take 2 semesters of Chapel.

# **4. Minor Graduation Requirements**

| 78            | ъщ | 2014 ~ <mark>2021</mark>                      |        |  |  |  |
|---------------|----|---|--------|--|--|--|
| 구분            | 종별 | Course  | Credit |  |  |  |
|               | MR | Fundamentals of Quantum Physics               | 3      |  |  |  |
|               |    | Introduction to Nanotechnology and Laboratory | 3      |  |  |  |
|               |    | Nano-characterization                         | 3      |  |  |  |
|               | ME |   | 9      |  |  |  |
|               |    | Subtotal                                      | 18     |  |  |  |
| Total Credits |    | 18  |        |  |  |  |

<sup>1.</sup> Only UIC students can apply for a minor within UIC major offerings.