CSE Undergraduate degree requirements (2021)
Graduation Requirements

[Liberal Arts]
• 53 credits or above

[Majors]
• If taking intensive course, 63 CSE major credits or above
• If having double, combined major, 45 CSE major credits or above
• If having minor, interdisciplinary major, 48 CSE major credits or above
  • Requisite major: 30 credits
  • Requisite major by regulation: 8 credits
  • Elective major

• Total 130 credits or more
• Credit average 2.0 or more
  • Credit average 2.0 or more for each subject
# 2021 Requirements of liberal arts courses

<table>
<thead>
<tr>
<th>Grade</th>
<th>1st Semester</th>
<th>2nd Semester</th>
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</thead>
</table>
| 1     | ▪ Foreign Languages (3 credits)  
▪ Calculus 1 and Calculus Practice 1 or Honor Calculus 1 and Honor Calculus Practice 1 (3 credits)  
▪ Physics 1*(can be replaced with Foundation of Physics 1 or Honor Physics 1) and Physics Lab. 1, Physics 2*(can be replaced with Foundation of Physics 2 or Honor Physics 2) and Physics Lab. 2,  
Chemistry 1 and Chemistry Lab. 1, Chemistry 2 and Chemistry Lab. 2, Biology 1 and Biology Lab. 1, Biology 2 and Biology Lab. 2,  
Physics and Physics Lab., Chemistry(or Advanced Chemistry) and Chemistry Lab., Biology and Biology Lab. (8 credits)  
▪ Digital Computer Concept and Practice (3 credits) | ▪ College Writing1 (2 credits)  
▪ Calculus 2 and Calculus Practice 2 or Honor Calculus 2 and Honor Calculus Practice 2 (3 credits)  
▪ Physics 1*(can be replaced with Foundation of Physics 1 or Honor Physics 1) and Physics Lab. 1, Physics 2*(can be replaced with Foundation of Physics 2 or Honor Physics 2) and Physics Lab. 2,  
Chemistry 1 and Chemistry Lab. 1, Chemistry 2 and Chemistry Lab. 2, Biology 1 and Biology Lab. 1, Biology 2 and Biology Lab. 2,  
Physics and Physics Lab., Chemistry(or Advanced Chemistry) and Chemistry Lab., Biology and Biology Lab. |
| 2     | ▪ College Writing2: Writing in Science & Technology (2 credits)  
▪ Statistics, Statistics lab (4 credits)  
 ▪ Engineering Mathematics1 (3 credits) | ▪ Engineering Mathematics2 (3 credits)  
▪ World of Knowledge(3 credits) |
| 3     | ▪ Foreign Languages (2 or 3 credits)  
▪ World of Knowledge(3 credits) | World of Knowledge(3 credits) |
| 4     | ▪ World of Knowledge(3 credits) | ▪ World of Knowledge(3 credits) |
# 2021 Year Requisite major

<table>
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<tr>
<th>Grade</th>
<th>1st Semester</th>
<th>2nd Semester</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>▪ Discrete Mathematics (3 credits)</td>
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</tbody>
</table>
| 2     | ▪ Computer Programming (4 credits)  
▪ Logic design (4 credits) | ▪ Electrical and Electronic Circuits (3 credits)  
▪ **Computer Engineering Seminar** (1 subject among 2 seminar subjects) (1 credit)  
▪ Computer Architecture (3 credits)  
▪ Data Structure (4 credits)  
▪ ( )* **CoE common subjects** (3 credits) |
| 3     | ▪ Systems programming (4 credits)  
▪ **Principles and Practices of Software development** (4 credits) | ▪ Algorithms (3 credits)  
▪ **Creative Integrated Design1** (1 subject among 1 and 2) (3 credits) |
| 4     | ▪ **IT-Leadership seminar** (1 subject among 2 seminar subjects) (1 credit)  
▪ **Creative Integrated Design2** (1 subject among 1 or 2) (3 credits) | ( )* **CoE (College of Engineering) common subjects**  
▪ Have to complete 3 credits from all CoE common criteria  
▪ 400.XXX or M2177.XXXXXXX subject can be approved maximum. 9 credits(Integrated Nano system and Introduction to deep learning will be exempted from 9 credits limitation) |
## 2021 Year Elective Major

<table>
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<tr>
<th>Grade</th>
<th>1&lt;sup&gt;st&lt;/sup&gt; Semester</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>▪ Programming Practice</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>▪ Convergence of Information and Communications Technology</td>
<td>▪ Principles of Programming</td>
</tr>
</tbody>
</table>
| 3     | ▪ Automata Theory  
       ▪ Linear and Non-linear Computation Models  
       ▪ Basic Digital Signal Processing  
       ▪ Introduction to Data Mining | ▪ Operating Systems  
       ▪ Hardware System design  
       ▪ Programming language  
       ▪ Database  
       ▪ Data Communications  
       ▪ Introduction to IT Entrepreneurship |
| 4     | ▪ Embedded Systems and Applications  
       ▪ Software engineering  
       ▪ Artificial Intelligence  
       ▪ Compiler  
       ▪ Computer Graphics  
       ▪ Computer Networks  
       ▪ Social Network Analysis  
       ▪ Introduction to Quantum Computing and Information  
       ▪ Understanding Blockchains  
       ▪ Field Application of Computer Education | ▪ Software Application  
       ▪ Mobile Computing and its Applications  
       ▪ Computer Modelling  
       ▪ Multicore Computing  
       ▪ Introduction to Computer Security  
       ▪ Computer Convergence Application  
       ▪ Human-Computer Interaction  
       ▪ Introduction of Machine Learning  
       ▪ Computer Vision  
       ▪ Topics in Computer New Technology  
       ▪ Internet Security |
Other Requirements

• Must Complete “Life Protection Education”
  • no credits, but mandatory for graduation
  • How to apply
    SNU eTL Log in → SNUON Lecture List → search for
    [공과대학] 생명존중(자살예방) 교육 -> Apply
  Course period
    (1st) 2021.02.22.(MON) ~ 03.17.(WED)
    (2nd) 2021.04.12.(MON) ~ 05.26.(WED)
  • Submission
    Print out your certificate from My SNUON after completing your education and submit it to CSE admin office (Bldg#301, Room#316) during 2021. (Non face-to-face submission is available)

• Must complete “SNU Environmental Safety Education”
  • no credits, but mandatory for graduation
  • Off-line or On-line (rsis.snu.ac.kr)