SKKU
At a Glance

Unique Origin, Unique Future
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1398</td>
<td>Old Sungkyunkwan Founded in Seoul</td>
</tr>
<tr>
<td></td>
<td>Higher educational institution of Joseon Dynasty</td>
</tr>
<tr>
<td>1475</td>
<td>Jongyeonggak created</td>
</tr>
<tr>
<td></td>
<td>Royal library/archive for books and documentations</td>
</tr>
<tr>
<td>1978</td>
<td>Natural Sciences Campus opened in Suwon</td>
</tr>
<tr>
<td></td>
<td>First dual campus system in South Korea</td>
</tr>
<tr>
<td>1996</td>
<td>Samsung joined University Foundation</td>
</tr>
<tr>
<td></td>
<td>Long-term technological and financial support</td>
</tr>
<tr>
<td>2015</td>
<td>QS World University Ranking: 118th</td>
</tr>
<tr>
<td></td>
<td>Rapid rise in global reputation</td>
</tr>
</tbody>
</table>
## Facts and Figures

| Organization         | - 2 Campuses: NSC / HSSC  
<table>
<thead>
<tr>
<th></th>
<th>- 15 Colleges: 7 NSC / 8 HSSC</th>
</tr>
</thead>
</table>
| Undergraduate        | - NSC: 8,300 / HSSC: 11,000  
| Graduate             | - NSC: 3,400 / HSSC: 4,200   |
| Staff                | - Academic: 1,400             
|                      | - Administrative: 1,000       |
| International        | - Degree-seeking: 1,800       
| Student              | - Non-degree seeking: 1,900   |
| Global Network       | - 700 academic collaborations |
|                      | - 200 student exchange partners |
8 Colleges

- College of Science
- College of Information & Communication Engineering
- College of Engineering
- School of Pharmacy
- College of Biotechnology & Bioengineering
- College of Sport Science
- School of Medicine
- College of Software

Features

- IBS Centers: 84 million USD for 10 years each
  - Center for Integrated Nanostructure Physics
  - Center for Neuroscience Imaging Research
- Top 1-2% STEM/Medical students nationwide apply
- SKKU Advanced Institute of Nanotechnology (SAINT)
  - World #1 in Graphene Patents / NANO Journal (SCI ranked)
- On-Campus BASF Research Center established in 2013
Partnership with Samsung

**SAMSUNG**
- Funds scholastic and research programs
- Provides expertise through guest lecturers
- Supports SKKU’s management and sustainability

**SKKU**
- Provides qualified graduates for the work force
- Supplies research facilities and resources

- Joint Research (2013): 258 Projects & 10.7 million USD
- Co-developed programs: software, mobile phone, semi-conductor
- Research project offerings by Samsung Foundation for Future Technology
College of Science
At a Glance

What We Create Here Will Become the New Beginning.
Academic Disciplines

Biological Sciences

Physics

Mathematics

Chemistry

Interdisciplinary Physics & Chemistry

BrainKorea21 PLUS

Proud Winner of BK21PLUS: Biosciences, Math, Physics, Chemistry
## Academic Programs

<table>
<thead>
<tr>
<th>Department</th>
<th>BS</th>
<th>MS</th>
<th>PhD</th>
<th>CMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Sciences</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mathematics</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Physics</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Chemistry</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IPC</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

| Duration | 4  | 2  | 2   | 6-8 |
| Credit Requirement | 130 | 24 | 36  | 51  |

*CMP: Combined Master/PhD

## Student & Faculty

<table>
<thead>
<tr>
<th>Department</th>
<th>Undergrad</th>
<th>Grad</th>
<th>Faculty</th>
<th>S/F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Sciences</td>
<td>330</td>
<td>60</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td>Mathematics</td>
<td>350</td>
<td>30</td>
<td>28</td>
<td>13</td>
</tr>
<tr>
<td>Physics</td>
<td>220</td>
<td>75</td>
<td>32</td>
<td>9</td>
</tr>
<tr>
<td>Chemistry</td>
<td>300</td>
<td>160</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>IPC</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sum</td>
<td>1200</td>
<td>330</td>
<td>112</td>
<td>-</td>
</tr>
</tbody>
</table>
Research Centers

College of Science

Institute for Basic Sciences

Research Center for Basic Sciences
Research Center for Quantum Materials and Superconductivity
Chemical & Biological Detection Research Center
Creative Research Initiatives Center for Smart Molecular Memory
Research Institute of Nanobio Convergence
Institute of Science and Technology in Space
Center for Non-linear Ergodic Theory Studies

BK21 Funded Research Group

Dept. of Biological Sciences
Division for Developing Integrated and Creative Human Resources in Biological Sciences

Dept. of Mathematics
Creative Human Resources of Mathematical Science Nurture Division

Dept. of Physics
Division of Human Resource Development for Next-Generation Leaders in Physics

Dept. of Chemistry
HRD Center for Creative Convergence Chemical Sciences
Research Areas

- Molecular and Cell Biology
- Organisms and Evolutionary Biology
- Biochemistry and Structural Biology
- Physiology and Developmental Biology
- Plant Biology
- Marine Biology and Ecology
- Biophysics
- Virology
- Microbiology

- Analysis
- Algebra
- Cryptography
- Differential Geometry
- Topology
- Applied Mathematics
  - Biostatistics
  - Probability
  - Complex Dynamics
  - Monte Carlo Simulation

- Condensed Matter,
- Statistical Physics
- Acoustics
- Nanophysics
- Nuclear and Particle Physics
- Astrophysics
- Biophysics

- Energy/Environmental Chemistry
- Catalyst
- Medicinal Chemistry
- Life Science/Biochemistry
- Electronic / Nano-Materials
- Theoretical Chemistry
- Solar Cells
B-4  Key Indicators

### International research paper

- **Unit**: number
- **Years**: 2012 to 2015
- **Values**: 569, 578, 622, 704

### Technology transfer income

- **Unit**: Thousand USD
- **Years**: 2012 to 2015
- **Values**: 182, 210, 102, 279

### Citation per research paper

- **Unit**: Average
- **Years**: 2012 to 2015
- **Values**: 5.30, 6.01, 6.78, 6.20

### Target grad student admission rate

- **Unit**: %
- **Years**: 2012 to 2015
- **Values**: 31.0, 34.8, 45.3, 41.7

### Research funding

- **Unit**: Million USD
- **Years**: 2012 to 2015
- **Values**: 27.7, 28.4, 23.7, 19.1

### Undergraduate dropout rate

- **Unit**: %
- **Years**: 2012 to 2015
- **Values**: 5.92, 5.66, 4.73, 3.98
Global Engagement

45 Academic Collaboration Partners

15 Student Mobility Program Partners

College of Science Global Initiative 2015-2016
- Expanding territory of joint-academic activities and student mobility
- Exploring study/research abroad experiences for science students

SCI-WORLD: Study Aboard Program for Science Students
- Developing student mobility programs with sister universities
- semester exchange, summer lab internship, dual/joint degree program
SCI-WORLD: Science + World

**Student Exchange**

The University of Western Australia
Tohoku University
Radboud Universiteit Nijmegen
UMICA Universitet
Bregische Universität Wuppertal

Linnæus University
Gdańsk University of Technology
National Taiwan University

**Laboratory Internship**

The University of Edinburgh
Indiana University
KMUTT

**Dual Degree**

UTD
Future Possibility

- **Laboratory Internship Program**
  - Semester-based or summer/winter science laboratory internship

- **Student Group Invitation**
  - Scholastic and research student group’s scientific visit to SKKU

- **Faculty-led Program**
  - Host tailored faculty-led study abroad embedded in SKKU coursework

- **International Joint-research Activity**
  - Individual or organized international collaborative research in natural sciences

- **Traditional Programs**
  - Regular semester-based student exchange for earning credits
  - 2+2/2+3 dual or joint degree
Thank You

cscience@skku.edu
http://cscience.skku.edu
+82-31-290-5802