Sungkyunkwan University
School of Mechanical Engineering

Sungkyunkwan University (SKKU)
2014
• Founded in 1398
• Highest Royal Educational Institute
• Sponsored by Samsung
• Historical & State-of-the-art

• Hwang Lee (1501~1570)
  • Confucian
  • SKKU President in 1543

• Lee Lee (1536~1584)
  • Confucian
  • H. Lee’s Student
  • Outstanding SKKU Alumnus

• King Sejong (1397~1450)
  • Chairman, SKKU Board of Trustees
  • Invented Korean Alphabet

• Mrs. Shin (1504~1551)
  • Great Painter, Writer, Poet
  • Lee Lee’s Mother
  • SKKU PTA
Sungkyunkwan University (SKKU)

- 1398 The foundation of the first national education institute in Korea: Sungkyunkwan
- 1895 Sungkunkwan is reformed as a modern three-year college
- 1946 The reopening of the Sungkyunkwan College
- 1996 The Samsung Group joins the University Foundation
- 1998 600th Anniversary

2013 QS ranking Asia 21st, World 168th

SKKU is among top 3 private universities in Korea

Student Enrollment
- Undergraduate: 19,365
- Graduate: 5,768

Full Time Faculty: 1,388

Campus
- Humanities and Social Sciences Campus in Seoul
- Natural Sciences Campus in Suwon
Research fund – Government: $9 million/year, Industry: $1 million/year
- SKKU ME is collaborating closely with Samsung Electronics Corporation and Hyundai Motor Corporation (more than half of total industry fund is from SEC and HMC).

HRD Center for Human-Friendly Convergence System
- the center of BK 21+ program, supported by Korean government in SKKU ME, was ranked #5 in selection competition
- to educate students Human-Friendly IT, ET, NT & BT (Information-, Environment, Nano- & Bio-Technology) convergence mechanical system design

Total number of professors and students in ME

Professors
35

Undergraduate Students
1017

Graduate Students
202

International Students
26
### 2013 QS ranking – Mechanical Engineering

#### 2013 QS World University Rankings by Subject

**Engineering - Mechanical, Aeronautical & Manufacturing**

<table>
<thead>
<tr>
<th>Institutions Listed</th>
<th>Institutions Ranked</th>
<th>Papers Indexed</th>
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<tbody>
<tr>
<td>1,257</td>
<td>200</td>
<td>1,052,867</td>
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#### Ranking Table

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<tr>
<th>Year</th>
<th>Rank</th>
<th>Category</th>
<th>Institution</th>
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<td>2013</td>
<td>19</td>
<td>51-100</td>
<td>KAIST</td>
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<td>29</td>
<td>33</td>
<td>SNU</td>
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<td></td>
<td>70</td>
<td>51-100</td>
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<td>80</td>
<td>151-200</td>
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<td>94</td>
<td>51-100</td>
<td>KOREA</td>
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</table>
SKKU ME Research

- Next Generation Vehicles
- Systems and Control Engineering
- Energy Conversion System
- Computer Simulations for Thermal-Fluids Phenomena and Their Control
- Combustion, Air Pollution and Laser Diagnostics
- Manufacturing Processes and System
- Mechatronics and robotics
- System/material Integrity and Reliability
- Micro/Nano/Bio Mechanical Engineering
School of Mechanical Engineering

Laboratories in SKKU ME

**Fluid/Thermal Engineering**
- Fluid Mechanics Lab.
- Gas Dynamics Lab.
- Heat & Mass Control Lab.
- Nanoparticle Tech. Lab.
- Energy Engineering Lab.
- 2-D Nanomaterial Lab.
- Heat Transfer Lab.
- Internal Combustion Engine Lab.
- New Energy System Lab.
- Smart Future Air Conditioning System Lab.
- Multi-Physics Nano-Fluidics Lab.

**Solid/Material Engineering**
- Integrity Evaluation Lab.
- Mechanical Material Lab.
- Reliability Evaluation Lab.
- Advanced Non-Destructive Evaluation Lab.
- Tribology Lab.
- Computational Bio-eng. Lab.
- Virtual Works Lab.
- Biomedical Eng. Lab.
- Creative System Eng. Lab.
- Energy Conversion Lab.
- Micro/Bio Transports Lab.

**Manufacturing/Control Engineering**
- Automotive Mechatronics Lab.
- Dynamic System Design Lab.
- Intelligent Robotics & Mechatronic System Lab.
- Manufacturing Systems Lab.
- Mechanical Eng. Control Lab.
- Product Design & Production Systems Lab.
- Robotics and Intelligent Systems Lab
- Computer Aided Design Lab.
- Computer aided Modeling and Simulation Lab.
- Mechanical Vibration Lab.
- Micro-Nano system Lab.
<table>
<thead>
<tr>
<th>Major Area</th>
<th>Professors</th>
<th>Laboratory</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid/Thermal Engineering</td>
<td>Young–Kyu Hwang</td>
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<td><a href="mailto:ykhwang@skku.edu">ykhwang@skku.edu</a></td>
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<tr>
<td></td>
<td>Youn–Jea Kim</td>
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<tr>
<td></td>
<td>Han–Seo Ko</td>
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</table>
Benefits for international applicants

**Graduate Students**
- Tuition
- Living expense
- Health Insurance

**Post Doc.**
- Salary 25,000,000 Won/Year (About $25,000/Year) + Incentive
- Health Insurance

**Research Prof.**
- Salary 30,000,000 Won/Year (About $30,000/Year) + Incentive
- Health Insurance
- Minimum 2 years of experience (after obtaining PhD degree)

Questions to Professor Taesung Kim
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Office of Admission
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Thank you!