Blackboard2Blackboard: The evolution of Lehigh University from 1967

“Blackboard2Blackboard” (or Blackboard to Blackboard) refers to one of the most noticeable trends in higher education over the past 40 years, namely the adoption of increasingly capable technology in teaching and learning. In 1967, teaching technology was dominated by chalk and blackboard, while today, nearly all instructors and students use a web–based collaboration platform known as Blackboard to exchange documents, hold interactive “chat” sessions, submit assignments, and maintain course–related channels of communication.

In this document, we report, as an executive summary, key observations about the overall sweep of changes at Lehigh, which are supported by data and other information in the following appendices.

Executive Summary

Lehigh’s Development as an Institution

Campus Growth
- Acquisition of new land significantly expands Lehigh’s campus (Appendix A)
- Increase in the number of academic buildings, and arts, entertainment, and sports facilities on campus (Appendix B)

Campus-Based Initiatives
- Increase in the number and diversity of research centers and institutes at the university. Continued growth of campus-based research initiatives in engineering and the sciences, and development of initiatives in the humanities and business (Appendix C)

Fundraising and Finance
- Increase in the university’s budget and endowment (Appendix D)
- Implementation of more effective and dynamic fundraising initiatives (Appendix E)
- Increase in annual gifts and foundation gifts given to the university (Appendix F)

Research Expenditures
- Increase in research expenditures and sponsored research (Appendix G)

1 We gratefully acknowledge the efforts of Ms. Holly Kent, PhD candidate in History, for gathering the information presented in this report. Information prior to the early to mid–1980s is especially difficult to gather for comparison with more recent information, and without Ms. Kent’s efforts, we would have much less to report. This report should be considered a work in progress. Gaps remain that we aspire to fill, and we aim to create a sustainable process for maintaining and enhancing this longitudinal view of the institution.
**Library and Technology Services**

- Increased availability and diversity of library and technology services to faculty, staff, and students. Higher levels of technological complexity and sophistication in library and technology services. Substantial renovations to Linderman Library (Appendix H)

**Faculty, Staff, and Students At Lehigh**

**Faculty Numbers**

- Decrease in number of adjunct faculty hired by the university and recent adoption of lecturer and professor of practice ranks to stabilize utilization of non–tenure–track instructional staff by giving individuals medium–term commitments with evaluation processes (Appendix I)
- A recent increase in total tenure-track and tenured professors has been driven by increases in the assistant professor rank, following a retirement–incentive–stimulated decrease in full professors and slow–down in hiring (Appendix I)
- Modest increases in numbers of faculty members in the Colleges of Arts and Sciences, the College of Business and Economics, and the College of Education (Appendix J)

**Staff**

- Increase in total staff numbers driven mainly by increase in exempt staff. Because the staff increase has been more rapid than the recent increase in faculty hiring, the staff:faculty ratio has also increased. (Appendix K)

**Enrollment and Student Ratios**

- Increased numbers of undergraduates and full–time graduates, along with decreased numbers of part–time graduates (Appendix L)
- Sharp increase in student:faculty ratio, followed by decrease to current level following recent hiring trends. Student:staff ratio has similarly decreased in recent years (Appendix L)

**Faculty Diversity (by region)**

- Increased diversity of faculty members along the lines of region (Appendix M)

**Tenure and Promotion Review**

- Tenure and promotion process more transparent, comprehensive, and rigorous (Appendix N)
  - Increased emphasis on external, as well as internal, reviews of candidates
  - Increased emphasis on balance between excellence in teaching, research, and service
Staff Support and Assistance
- Development of more extensive support services and information resources for staff members in terms of health care, child care, and benefits for employees and their partners or spouses (Appendix O)

Academic Support Services
- Increase in the number of programs available for students seeking academic support and assistance and for students with learning disabilities (Appendix P)

Admissions
- Increased emphasis on admitting students from diverse backgrounds, and evaluating students not solely according to academic excellence, but also in terms of their leadership potential and their commitment to serving their communities (Appendix Q)

Athletics
- Increase in the number of varsity sports teams and the number of student athletes (Appendix R)
- The creation and development of women’s athletics (Appendix S)

Curricula
- Development of stronger curricula in all four colleges. Development of more diverse and interdisciplinary undergraduate major, undergraduate minor, and graduate programs (Appendix T)

Diversity
- Admission of, and significant increase in the number of, undergraduate female students (Appendix U)
- Decrease in undergraduate student population from the local region (Pennsylvania, New Jersey, and New York) (Appendix V)
- Increase in international graduate student population (Appendix W)

Financial Aid
- Increased availability of financial aid for all of Lehigh’s undergraduate population (Appendix X)

Greek Life
- More university oversight and increased evaluation of fraternities and sororities, and more support for students within the Greek system (Appendix 1)
- Establishment and development of sororities (Appendix 2)

Interdisciplinary Initiatives
- Increase in interdisciplinary programs and initiatives (Appendix 3)
Residential Services
- Increase in number of residence halls, varieties of specialty housing, and security within on-campus housing facilities (Appendix 4)

Student Affairs
- Increase in number of staff members and the variety of functions performed by the Student Affairs office. Increased numbers of Student Affairs staff members focusing on the first year experience, graduate student life, campus safety and security, judicial affairs, residence life, and issues of concern to minority, female, LGBTQ, and international students (Appendix 5)

Student Life
- Increase in resources and programs available for minority, female, LGBTQ, and international students. Increase in fitness and recreation, health and wellness, and alcohol addiction prevention and education resources and programs for students (Appendix 6)

Student Research
- Increased opportunities for students to pursue independent research (Appendix 7)

Tuition
- Gradual increase in tuition rates, undergraduate and graduate (Appendix 8)
Appendix A: Campus Growth – Land

1963: Lehigh acquires 500 acres, which becomes the Murray H. Goodman Campus (added to the existing 360 acre Asa Packer campus)
1986: Lehigh acquires 742 acres, which becomes Mountaintop Campus
Appendix B: Campus Growth – Buildings

1965: Whitaker Laboratory
1969: Martindale Library
1970: Maginnes Hall
1970: Sinclair Laboratory
1971: Rathbone Hall
1972: Centennial School
1975: Seeley G. Mudd
1975: Neville Hall
1976: Philip Rauch Field House
1979: Stabler Athletic and Convocation Center
1984: Mohler Laboratory
1985: Fairchild-Martindale Library and Computing Center
1988: Murray H. Goodman Stadium
1990: Rauch Business Center
1997: Zoellner Arts Center
2000: Campus Square
2002: Ulrich Sports Complex
Appendix C: Campus-Based Research Initiatives

1967

6 research centers

- Center for the Application of Mathematics
- Center for Business, Economics, and Urban Studies
- Center for Information Services
- Center for Marine and Environmental Studies
- Center for Surface and Coatings Research
- Materials Research Center

1987

17 research centers

- Biotechnology Research Center
- Center for the Application of Mathematics
- Center for Design and Manufacturing Innovation
- Center for Economic Education
- Center for Health Sciences
- Center for Innovation Management Studies
- Center for Marine and Environmental Studies
- Center for Social Research
- Center for Surface and Coatings Research
- Energy Research Center
- Martindale Center for the Study of Private Enterprise
- Lehigh Valley Center for Jewish Studies
- Materials Research Center
- Process Modeling and Control Research Center
- Rauch Center for Executive Development
- Small Business Development Center
- Technology Studies Resource Center

8 research institutes

- Emulsion Polymers Institute
- Institute for Fracture and Solid Mechanics
- Institute for Metal Forming
- Institute for Robotics
- Institute for the Study of Commodities
- Institute for the Study of High-Rise Habitat
- Institute of Thermo-Fluid Engineering and Science
- The Lawrence Henry Gipson Institute for Eighteenth-Century Studies
2007

17 research centers

- Center for Advanced Materials and Nanotechnology
- Center for Engineering Logistics and Distribution
- Center for Manufacturing Systems Engineering
- Center for Optical Technologies
- Center for Polymer Science and Engineering
- Center for Promoting Research to Practice
- Center for Social Research
- Center for Value Chain Research
- Chemical Process Modeling and Control Research Center
- Energy Research Center
- Engineering Research Center for Advanced Technology for Large Structural Systems (ATLSS)
- Enterprise Systems Center
- Martindale Center for the Study of Private Enterprise
- Murray H. Goodman Center for Real Estate Studies
- Philip and Muriel Berman Center for Jewish Studies
- Polymer Interfaces Center
- Sherman Fairchild Center for Solid State Studies

11 research institutes

- Biopharmaceutical Technology Institute
- Building and Architectural Institute
- International Materials Institute for New Functionality in Glass
- Emulsion Polymers Institute
- Iacocca Institute
- Institute for Biomedical Engineering and Mathematical Biology
- Institute for Metal Forming
- Institute for Fracture and Solid Mechanics
- Institute for Thermo-Fluid Engineering and Science
- Lawrence Henry Gipson Institute for Eighteenth-Century Studies
- Manufacturing Logistics Institute
Appendix D: Fundraising And Finance – Budget And Endowment

**Budget**
Operating budget, 1967: $12.1 million ($73.0 million, adjusted for inflation to 2006)\(^1\)
Operating budget, 2007: $343.8 million

**Endowment**
1967: $40 million dollars ($241.4 million, adjusted for inflation to 2006)
1987: $181.3 million dollars ($321.7 million, adjusted for inflation to 2006)
2007: $1.1 billion dollars

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\(^1\) Inflated figures based on the consumer price index, from the Bureau of Labor Statistics.
Appendix E: Fundraising And Finance – Fundraising Initiatives

1967: Asa Packer Society is founded
1971: New Century campaign raises $6.6 million ($32.9 million, adjusted for inflation to 2006)
1985: First comprehensive plan of academic development, “Plans, Progress, and Priorities” is implemented
1997: Preserving the Vision campaign raises $312 million ($391.9 million, adjusted for inflation to 2006)
2004: Shine Forever campaign publicly launched with a goal of $500 million and a focus on scholarships and faculty chairs
Appendix F: Fundraising And Finance – Annual And Foundation Gifts

**Annual Giving**
1967: $820,000 ($4.9 million, adjusted for inflation to 2006)
1987: $22.1 million ($39.2 million, adjusted for inflation to 2006)
2006: $44.6 million

**Foundation Gifts**
1967: $169,665 ($1.0 million: adjusted for inflation to 2006)
1987: $1.3 million ($2.3 million: adjusted for inflation to 2006)
2006: $7.2 million
Appendix G: Research Expenditures

Research Expenditures
1967: $1.98 million ($11.9 million, adjusted for inflation to 2006)
1987: $22.1 million ($39.2 million, adjusted for inflation to 2006)
2007: $42.4 million dollars

Sponsored Research
1967: $3.1 million ($18.7 million, adjusted for inflation to 2006)
1987: $10.6 million ($18.8 million, adjusted for inflation to 2006)
2007: $50.3 million
Appendix H: Library And Technology Services

1967: Lehigh uses a General Electric 225 computer
1967: Lehigh owns 460,000 volumes; receives 4,000 periodicals; has average annual accession of 13,000 volumes
1968: Lehigh acquires a Control Data Corporation 6400 computer for $2.2 million ($13.2 million, adjusted for inflation to 2006)
1968: Martindale Science and Engineering Library ($1.75 million dollar building; $10.5 million adjusted for inflation to 2006) opens
1968: First in-house administrative computing system is created by in-house administrative staff
1976: Media Center opens
1976: Library has a staff of more than sixty: now provide more personalized assistance to faculty and staff
1980: Payroll Office and Registrar’s Office begin using computer technologies
1985: Fairchild-Martindale Library opens
1985: ASA library catalog is computerized
1985: First 600 personal computers acquired by Lehigh (350 for faculty members, 250 for public sites)
1985: Lehigh’s first curator hired
1985: Donors fund the opening of the Bayer Galleria of Rare Books and the Bayer Family Room in Lehigh’s Special Collections
1986: Campus networked for computer communications
1992: Lehigh acquires its millionth volume
1995-1996: Library and computing merge to become Information Resources under the Vice Provost for Information Resources
2000: Banner modules implemented for Financial Aid Office
2003: Library and Technology Services founded
2007: Linderman Library reopens after major renovation project
Appendix I: Faculty by Rank

Numbers of Assistant, Associate, and Full Professors and Non–Tenure–Track Faculty with Percentage of the Total Faculty (rank % of total by year)\(^2,3\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Assist. Prof.</th>
<th>Assoc. Prof.</th>
<th>Full Prof.</th>
<th>Tenure–Track Total</th>
<th>Non–Tenure–Track</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>1967</td>
<td>93 (32.0%)</td>
<td>79 (27.1%)</td>
<td>62 (21.3%)</td>
<td>234 (80.4%)</td>
<td>57 (19.6%)</td>
<td>291</td>
</tr>
<tr>
<td>1987</td>
<td>77 (20.3%)</td>
<td>98 (25.9%)</td>
<td>196 (51.7%)</td>
<td>371 (97.9%)</td>
<td>8 (2.1%)</td>
<td>379</td>
</tr>
<tr>
<td>2006</td>
<td>96 (21.7%)</td>
<td>104 (23.5%)</td>
<td>211 (47.6%)</td>
<td>411 (92.8%)</td>
<td>32 (7.2%)</td>
<td>443</td>
</tr>
</tbody>
</table>

These faculty counts do not include faculty in Physical Education, AFROTC (Aerospace Studies), or ROTC (Military Science).

Total faculty counts for 1975, 1977, 1978, 1979, and 1981 are estimated from affirmative action reports; we have not located data that provide better figures or breakdowns by rank.

Non–tenure–track figures include instructors, lecturers, and professors of practice. The 1967 figure also includes part-time instructors (adjuncts), but the available data do not permit easily separating them. Currently, the number of lecturers is arbitrarily capped at 10. There is no such cap on the number of Professors of Practice.
Appendix J: Faculty (all faculty, college % of total by year)

<table>
<thead>
<tr>
<th></th>
<th>1967(^5)</th>
<th>1987</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS</td>
<td>138</td>
<td>187</td>
<td>226</td>
</tr>
<tr>
<td>%</td>
<td>47.4%</td>
<td>49.3%</td>
<td>51.0%</td>
</tr>
<tr>
<td>CBE(^6)</td>
<td>31</td>
<td>52</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>10.7%</td>
<td>13.7%</td>
<td>14.4%</td>
</tr>
<tr>
<td>CEd</td>
<td>15</td>
<td>21</td>
<td>29</td>
</tr>
<tr>
<td>%</td>
<td>5.2%</td>
<td>5.5%</td>
<td>6.5%</td>
</tr>
<tr>
<td>RCEAS</td>
<td>107</td>
<td>119</td>
<td>124</td>
</tr>
<tr>
<td>%</td>
<td>36.8%</td>
<td>31.4%</td>
<td>28.0%</td>
</tr>
<tr>
<td>Total</td>
<td>291</td>
<td>379</td>
<td>443</td>
</tr>
</tbody>
</table>

\(^5\) In 1967, the Chemistry and Physics Departments were in the College of Engineering. They were shifted to CAS in July 1987, and the 1987 CAS count includes them.

\(^6\) College of Business and Economics was called the College of Business Administration in 1967.
Appendix K: Staff

<table>
<thead>
<tr>
<th></th>
<th>1967</th>
<th>1987</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exempt %</td>
<td>45</td>
<td>307</td>
<td>509</td>
</tr>
<tr>
<td>Research Exempt% (unknown)</td>
<td>116</td>
<td>155</td>
<td></td>
</tr>
<tr>
<td>Non-Exempt %</td>
<td>211</td>
<td>465</td>
<td>486</td>
</tr>
<tr>
<td>Total</td>
<td>256</td>
<td>888</td>
<td>1,150</td>
</tr>
</tbody>
</table>

No data are available to indicate whether a research exempt category existed in 1967.
Appendix L: Enrollments and Student Ratios

Enrollments

<table>
<thead>
<tr>
<th></th>
<th>1967</th>
<th>1987</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>UG FT³</td>
<td>3,066</td>
<td>4,623</td>
<td>4,637</td>
</tr>
<tr>
<td>Grad FT⁹</td>
<td>481</td>
<td>779</td>
<td>899</td>
</tr>
<tr>
<td>Grad PT</td>
<td>1,373</td>
<td>1,148</td>
<td>1,190</td>
</tr>
</tbody>
</table>

⁸ From 1967 through 1980, the available counts of undergraduate students are total headcounts, including both full time and part time students, so the FT count is an estimate. Undergraduate PT counts are typically less than 2% of the total, so they are not shown here.

⁹ From 1967 through 1974, the available counts of graduate students are total headcounts, including both full time and part time students, so the FT and PT counts are estimates.
### Appendix M: Regional Diversity of Faculty
Based on institution of PhD or other highest degree, includes non-tenure-track faculty

#### 1967
<table>
<thead>
<tr>
<th>Region</th>
<th>Faculty Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania</td>
<td>113</td>
<td>(36.9%)</td>
</tr>
<tr>
<td>Non-Pennsylvania, United States</td>
<td>182</td>
<td>(59.5%)</td>
</tr>
<tr>
<td>International</td>
<td>11</td>
<td>(3.6%)</td>
</tr>
</tbody>
</table>

#### 2006
<table>
<thead>
<tr>
<th>Region</th>
<th>Faculty Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania</td>
<td>83</td>
<td>(18.7%)</td>
</tr>
<tr>
<td>Non-Pennsylvania, United States</td>
<td>326</td>
<td>(73.6%)</td>
</tr>
<tr>
<td>International</td>
<td>34</td>
<td>(7.7%)</td>
</tr>
</tbody>
</table>
Appendix N: Tenure and Promotion Review

1967
• Emphasis on excellence in teaching and research (little emphasis on service)
• Review process includes letters from dean of the candidate’s college and the chair of candidate’s department (little in the way of extensive peer review either within or outside the university)

1987
• Emphasis on excellence in teaching, research, and service
• Teaching evaluated through peer and student evaluations
• Research progress measured through productivity and impact on broader scholarly community
• Service needs to involve service both to university and broader scholarly community
• Review process includes letters from both external and internal reviewers

2007
• Emphasis on excellence in teaching, research, and service
• Teaching evaluated through peer and student evaluations and exit interviews with graduating seniors; teachers must work on developing new courses and curricula, keeping existing courses up-to-date, and teaching courses on many levels
• Research progress measured through productivity and impact on broader scholarly community, both nationally and internationally
• Service should demonstrate candidate’s growth through leadership, working both within the university and the broader scholarly community
• Review process focuses on letters from both external and internal reviewers
• Each college has a Board–approved set of guidelines for tenure and promotion
Appendix O: Staff Support and Assistance

1967: No Human Resources office. Paperwork handled through the Payroll Office
1973: University begins to contribute to cost of Blue Cross hospitalization insurance for academic and non-academic staff
1975: University begins to contribute to the cost of Blue Shield physician and surgical insurance for academic and non-academic staff
1982: All staff members working 75% are eligible for full benefits
1990: Campus childcare center opens
2003: Lehigh employee benefits extended to employee domestic partners and children
Appendix P: Academic Support Services

c. 1990: A parent donates funds to found and staff a Peer Tutoring Center

c. 1992: Lehigh begins to fund the Peer Tutoring Center, allocating $20,000 for continuation of services

1993: First part-time Director of Support Services hired

1998: First full-time Assistant Dean and Director of Support Services hired

1999: Academic Support Services and Judicial Affairs are separated

1999: The Center for Writing, Math, and Study Skills moves from the Office of the Provost to the Dean of Students

2000: Assistant Dean for First-Year Students position is created

2001: Assistant Director of Academic Support for Students with Disabilities is hired, focusing on students with writing disorders

2004: Office of the First Year Experience created, and Director of Orientation and New Student Programs is hired

2005: Center for Academic Success opens

2006: Center for Academic Success begins to emphasize bringing programming into residence halls, athletic teams, and fraternities and sororities
Appendix Q: Admissions
Foci of admissions selections, based on admissions materials

1967
• Intellectual ability
• High standardized test scores
• High class rank

1987
• Intellectual ability
• High standardized test scores
• High class rank
• Work ethic and commitment to academic improvement
• Demonstrated ability in student’s chosen field of study

2007
• Commitment to admitting students from a diverse assortment of backgrounds
• Intellectual ability
• High standardized test scores
• High class rank
• Work ethic and commitment to academic improvement
• Demonstrated ability in student’s chosen field of study
• Demonstrated commitment to community service
• Potential for future leadership
Appendix R: Athletics – Varsity Teams and Athletes

Number of varsity teams

1967: 12  
1987: 19  
2007: 25

Number of student athletes

1967: 195  
1987: 384  
2007: 614
Appendix S: Women’s Athletics

1973: First women’s sports team at Lehigh (field hockey) established
1974: Women’s basketball and tennis teams established
1975: Women’s lacrosse team founded
1977: Women’s softball team founded
1982: Women’s tennis team wins the East Conference Title (making them the first women’s championship team)
2003: Women’s golf becomes Lehigh’s 24th varsity sport
2003: Women’s crew becomes Lehigh’s 25th varsity sport
2007: Lehigh supports 13 varsity sports for women (52% of varsity teams at Lehigh)
Appendix T: Curricula

College of Arts and Sciences

Major programs of study

1967: 21
American Studies, biology, chemistry, classical languages, economics and business administration, English, fine arts, foreign careers, geology, German, government, history, international relations, mathematics, natural resources, natural science, philosophy, physics, psychology, Romance languages, social relations

1987: 40
American Studies, anthropology, architecture, applied science, art, biology, chemistry, classics, classical civilization, computer science, economics, English, environmental science, French, foreign careers, geological science, geology, geophysics, German, government, history, international relations, journalism, mathematics, molecular biology, music, natural science, pre-dental science, pre-medical science, philosophy, physics, psychology, religion studies, science writing, social psychology, sociology, Spanish, statistics, theater, urban studies.

2007: 36
American Studies, anthropology, architecture, art, arts and engineering, astronomy, astrophysics, behavioral neuroscience, biochemistry, biology, chemistry, Earth and environmental sciences, ecology, engineering physics, English, environmental science, French, geological sciences, German, history, international relations, journalism, mathematics, molecular biology, music, music composition, philosophy, physics, political science, psychology, religion studies, science and environmental writing, sociology, Spanish, theatre, Women’s Studies

Minor programs of study

1967: 0

1987: 9
East Asian Studies, Interpersonal Behavior of Small Groups and Organizations, Jewish Studies, Latin American Studies, Law and Legal Institutions, Russian Studies, Science, Technology, and Society Program, Urban Studies, Women’s Studies

2007: 66
Actuarial science, Africana Studies, American literature, anthropology, applied mathematics, art, art and architecture history, Asian Studies, astronomy, biology, British literature, business, chemistry, Chinese, classical civilization, classics, cognitive science, communication, computer science, design arts, Earth and
environmental sciences, economics, education, engineering, English, environmental studies, French, German, graphic communication, health and human development, history, humanities minor in ethics, humanities minor in medieval studies, international relations, Japanese, Jewish Studies, journalism, Latin American Studies, military science, molecular biology, museum studies, music, music industry, peace studies, philosophy, physics, political science, probability and statistics, psychology, public administration, public relations, pure mathematics, religion studies, Russian, Russian Studies, Science, Technology, and Society, science writing, social relations, sociology, social psychology, Spanish, studio art, theatre, urban studies, Women’s Studies, writing

**Graduate programs**

1967: 13

Biology, English, geology, government, history, information sciences, international relations, mathematics, philosophy, physics, political science, psychology, social relations

1987: 11

Applied social research, biology, computer science, English, geology, government, history, information science, mathematics, psychology, social relations

2007: 14

American Studies, applied mathematics, biology, chemistry, Earth and environmental sciences, English, environmental policy design, history, physics, photonics, political science, psychology, sociology, statistics
College of Business and Economics\textsuperscript{10}

\textit{Major programs}

1967: 7
Accounting, economics, economic statistics, finance, foreign careers, management, marketing

1987: 5
Accounting, economics, finance, management, and marketing

2007: 10
Accounting, business information systems, business economics, computer science and business, economics, finance, integrated business and engineering, management, marketing, supply chain management

\textit{Minor programs}

1967: 0

1987: 0

2007: 5
Business, business information systems, entrepreneurship, real estate, supply chain management

\textit{Graduate programs}

1967: 3
Business and industrial economics, economics, master of business administration

1987: 2
Management science, master of business administration

2007: 7
Accounting and information analysis, analytical finance, economics, health and biopharmaceutical economics, master of business administration, master of business administration and educational leadership, master of business administration and engineering

\textsuperscript{10} College of Business and Economics was called the College of Business Administration in 1967.
P.C. Rossin College of Engineering and Applied Science

Major programs

1967: 10
Chemical engineering, chemistry, civil engineering, electrical engineering, engineering mechanics, engineering physics, fundamental sciences, industrial engineering, mechanical engineering, metallurgy and materials science

1987: 11
Biochemistry, chemical engineering, chemistry, civil engineering, computer science, electrical engineering, fundamental science, industrial engineering, mechanical engineering and mechanics, metallurgy and materials engineering, physics

2007: 20
Applied science, arts and engineering, bioengineering, chemical engineering, chemistry, civil engineering, computer science, computer science and business, electrical engineering, engineering mechanics, engineering physics, environmental engineering, industrial engineering, information and systems engineering, information systems and engineering leadership program, integrated business and engineering, integrated degree in engineering, arts, and science, integrated product development, materials science and engineering, mechanical engineering

Minor programs

1967: 0

1987: 0

2007: 13
Aerospace engineering, biotechnology, business, chemical engineering, computer science, engineering, entrepreneurship, environmental engineering, humanities and social sciences, manufacturing systems, materials science, nanotechnology, polymer science and engineering

Graduate programs

1967: 9
Applied mechanics, chemical engineering, chemistry, civil engineering, electrical engineering, industrial engineering, materials, mechanical engineering, metallurgy and materials science

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11 RCEAS called the College of Engineering in 1967, and the College of Engineering and Physical Sciences in 1987. Although by the 1987–88 academic year, the Chemistry and Physics Departments had been moved to the College of Arts and Sciences, degree programs in chemistry and physics continued in RCEAS.
1987: 15
Applied mathematics, chemistry, chemical engineering, clinical chemistry, civil engineering, computer science and electrical engineering, electrical engineering, industrial engineering, manufacturing systems engineering, mechanical engineering and mechanics, metallurgy and materials engineering, molecular biology, physiological chemistry, polymer science and engineering, solid state research

2007: 17
Analytical finance, chemical engineering, civil engineering, computer engineering, electrical engineering, environmental engineering, industrial engineering, information and systems engineering, management science, manufacturing systems engineering, materials science and engineering, M.B.A and engineering, mechanical Engineering and mechanics, photonics, polymer science and engineering, quality engineering, wireless and network engineering
College of Education

Graduate programs

1967: 1
Education

1987: 12
Counseling, counseling psychology, educational administration, educational technology, elementary education, elementary and secondary school counseling, foundations of education, psychology studies, reading, secondary education, social restoration, special education

2007: 12
Counseling human services, counseling psychology, educational leadership, elementary education, global leadership, instructional technology, learning sciences and technology, masters of business administration and educational leadership, secondary education, school psychology, special education, special education: academic intervention
Appendix U: Diversity – Gender, Undergraduate Students

1967: 0% of undergraduate student population is female
1971: First female undergraduates admitted
2007: 41.7% of undergraduate student population is female
Appendix V: Diversity – Region, Undergraduate Students

Undergraduate student population from New York, New Jersey, and Pennsylvania:

<table>
<thead>
<tr>
<th></th>
<th>1967</th>
<th>1987</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>NY</td>
<td>16.8%</td>
<td>17.5%</td>
<td>14.9%</td>
</tr>
<tr>
<td>NJ</td>
<td>18.0%</td>
<td>29.1%</td>
<td>27.1%</td>
</tr>
<tr>
<td>PA</td>
<td>42.5%</td>
<td>27.5%</td>
<td>25.1%</td>
</tr>
</tbody>
</table>
Appendix W: Diversity – International, Graduate Students

Graduate student population, international:

1967: 5.2%
1987: 15.4%
2007: 22.4%
Appendix X: Financial Aid

1967: $6.1 million ($36.8 million adjusted for inflation to 2006) awarded to 1,158 students (26% of the undergraduate population)

1990: Trustees vote to award financial aid to meet the needs of all students admitted to Lehigh

2007: $45.4 million awarded to 2,363 undergraduate students (50% of the undergraduate population)
Appendix 1: Greek Life – Evaluation, Oversight, and Support

1996: Residential Environment Review, first chapter-wide assessment program, begun
2002-2003: Greek Alumni Council founded
2003: Strengthening Greek Life task force formed
2004: Accreditation, chapter-wide assessment program recommended by the
      Strengthening Greek Life task force, begins
2005: Lehigh purchases Chi Psi from their alumni association; Lehigh then owns all
      fraternities except for Theta Chi
2007: Alpha Chi Rho loses its house and its recognition due to Accreditation; Delta
      Sigma Pi loses its recognition due to Accreditation
Appendix 2: Greek Life - Sororities

1975: Alpha Phi, the first sorority at Lehigh, is founded. Four other sororities (Alpha Gamma Delta, Alpha Omicron Pi, Delta Gamma, and Gamma Phi Beta) are founded within a year.

1987: 277 undergraduate women living in 6 sorority houses

1990: First sororities move onto the Hill

2007: 364 undergraduate women living in 8 sorority houses

2007: Percentage of undergraduate women in sororities: 37.8%
Appendix 3: Interdisciplinary Initiatives

Interdisciplinary majors

1967: 3
  American Studies
  Foreign Careers
  Natural Resources

1987: 4
  American Studies
  Foreign Careers
  Science, Technology, and Society Program (STS)
  Urban Studies

2007: 12
  Africana Studies
  American Studies
  Asian Studies
  Classical Studies
  Cognitive Science
  Design Arts
  Earth and Environmental Sciences
  Russian Studies
  Society, Technology, and Society Program
  South Mountain College
  Urban Studies
  Women’s Studies

Interdisciplinary minors

1967: 0

1987: 5
  Afro-American Studies\(^\text{12}\)
  American Studies
  Law and Legal Institutions
  Science, Technology, and Society Program (STS)
  Urban Studies

2007: 13
  Africana Studies
  Asian Studies
  Classical Studies
  Cognitive Science

\(^{12}\) Afro-American Studies minor being formalized in 1987.
Design Arts
Earth and Environmental Sciences
Humanities minor in ethics
Humanities minor in medieval studies
Jewish Studies
Russian Studies
Society, Technology, and Society Program
Urban Studies
Women’s Studies
Appendix 4: Residential Services

Residence Halls

1965: Centennial I and II
1973: Saucon Village
1974: Saucon Married and Graduate Student (SMAGS) housing
1975: Trembley Park
1979: Brodhead House
1987: 2,001 undergraduates living in residence halls
1987: An increased focus on campus security in the wake of the rape and murder of undergraduate student Jeanne Clery on campus
1998: Sayre Park Village
2002: Campus Square
2007: 2,331 undergraduates living in residence halls
2007: Lehigh offers 6 specialty residence halls: Global Citizen House, ROTC House, South Mountain College, Substance-Free housing, Taylor Residential College, and Umoja House

Total new spaces opened on campus, 1967-2007: 1,400
Appendix 5: Student Affairs

1967
Dean of Students Office has 7 staff members:
- Dean of Students
- Dean of Student Life
- Director of Residence Halls and Student Life
- Associate Dean of Students
- Assistant Dean of Students
- Assistant Dean of Student Life
- two Assistant Directors of Residence Halls

1987
Dean of Students Office has 11 staff members:
- Dean of Students
- three Associate Deans of Students
- Assistant Dean and Director of the Challenge for Success Program
- Assistant Dean of Students
- Coordinator of International Students
- Coordinator of Residence Life
- Coordinator of Greek Life
- Coordinator of Student Organizations
- Residence Area Coordinator

2007
Student Affairs Office staff includes 30 staff members:
- Vice Provost for Student Affairs
- Director of Counseling and Psychological Services
- Director of Student Health Services
- Chief of University Police
- Director of the Office of Special Projects
- Director of the Women’s Center
- Director of LGBTQ+ Outreach and Programs
- Director of Military Science and Leadership
- Director of Graduate Student Life
- Dean of Students
- Associate Dean for Residence Life and Fraternity and Sorority Affairs
- Assistant Dean of Judicial Affairs
- Assistant Dean of Fraternity and Sorority Affairs
- Greek Life Counselors
- Assistant Dean of Residence Life
- Residence Life Coordinators
- Associate Dean for Student Development
- Assistant Dean of Student Activities
- Assistant Dean of Multicultural Affairs
- Assistant Dean of Student Leadership Development
- Greek Life Leadership Coordinator
- Coordinator of Community Service
- Program Coordinator for Recreation and Late Night
- Associate Dean of Academic Support
- Assistant Dean for First Year Experience
- First Year Student Programs Coordinator
- Director of the Center for Writing, Math, and Study Skills
- Assistant Dean for Learning Disabilities
- Assistant Director of Academic Support Services
- Coordinator of the Center for Academic Success
Appendix 6: Student Life

1989: Presidential Commission formed to examine the concerns of women and minorities on campus
1990: Fitness Center opens in Taylor Gym
1991: Women’s Center is founded and established in Johnson Hall
1993: Welch Fitness Center opens
1996: Lehigh receives a grant from the Robert Wood Johnson foundation for five years of study into how to address alcohol problems amongst undergraduates
1996-2001: Project IMPACT (an alcohol education program) is implemented on campus. Campus crime decreases by 50 percent
2000: Women’s Center hires its first full-time director and moves into the University Center
2003: International Center created (houses Office of International Students and Scholars, the Study Abroad Office, and English as a Second Language (ESL) department)
2003: Women’s Center hires a Sexual Violence Prevention Coordinator
2005: Women’s Center launches Break the Silence, a sexual violence peer hotline
2005: Joint Multicultural Program begins
2007: LGBTQ Programs and Outreach Director hired
Appendix 7: Student Research

1967: 20 undergraduate courses centered on independent research, in 14 subject areas:

- Biology, chemical engineering, economics, English, geology, German, government, history, international relations, Latin, mathematics, philosophy, psychology, social relations

1987: 34 undergraduate courses centered on independent research, in 22 subject areas:

- Accounting, art, biology, chemistry, civil engineering, English, electrical engineering, French, finance, geology, government, history, international relations, management, marketing, mathematics, music, philosophy, psychology, religion studies, social relations, Spanish

2007: 156 undergraduate courses centered on independent research, in 46 subject areas:

- Accounting, Africana Studies, American Studies, anthropology, art, architecture, Asian Studies, astronomy, bioengineering, biology, business, chemistry, Chinese, civil engineering, classics, computer science, computer science and engineering, design arts, Earth and environmental science, economics, electrical and computer engineering, English, environmental studies, finance, German, history, humanities, industrial systems and engineering, international relations, Japanese, journalism, management, marketing, materials science and engineering, mathematics, mechanical engineering and mechanics, music, philosophy, political science, psychology, religion studies, Society, Technology, and Society, sociology, Spanish, urban studies, women’s studies.
Appendix 8: Tuition

Tuition, graduate

1967: $700 per semester or $60 per credit hour, whichever is lower ($4,225 per semester, or $362 per credit hour, adjusted for inflation to 2006)

1987: $5,250 per semester or $440 per credit hour, $150 additional charge for engineering and science students ($9,305 per semester or $780 per credit hour, $266 additional charge for engineering and science students, adjusted for inflation to 2006)

2007: $990 per credit hour for the College of Arts and Sciences; $630 per credit hour for the College of Business and Economics; $510 per credit hour for the College of Education; and $990 per credit hour for the College of Engineering and Applied Science

Tuition, undergraduate

1967: $900 per semester; $1,800 per year ($5,432 per semester; $10,865 per year, adjusted for inflation to 2006)

1987: $10,500 per year for tuition; $1,850-$2,250 per year for residence halls; $980-$1,500 per year for the meal plan ($18,610 a year for tuition; $3,279-$3,988 per year for residence halls; $1,736-$2,659 per year for meal plans, adjusted for inflation to 2006)

2007: $33,470 per year for tuition; $5,100-$5,950 per year for residence halls; $600-$4,200 per year for meal plans
Thinking ahead to 2047
3 October 2007 (com)

- can’t assume constant supply of qualified students
- will higher ed need to stimulate K-12? improve college readiness, improve college-going rates
- what about costs of higher ed, the business model?
- anticipate continued progress in technology
  - health care
  - computing and communication
  - energy and environment
  - transportation/aerospace
  - applications of
    - optical technology
    - nanoscience/technology
    - neuroscience/technology
- issues related to the human condition
  - poverty
  - disease/hunger
  - human rights
  - social justice
- important academic areas (in addition to science/technology)
  - languages
  - computing—process flow, parallelism
  - systems
  - ethics and religious studies
  - human factors and cognition
- interdisciplines, emerging fields
- evolution of pedagogy
  - teamwork/collaboration
  - experiential learning, independent learning
  - shifting focus from content to process
  - service learning/community action
- evolution of tenure/promotion expectations
  - academic/pedagogic innovations
  - collaboration
  - balance of content and process
  - assessment of student learning at all levels—course, program, institution
  - academic/student affairs partnership—support for parallel student learning and development