



*Graduate School  
Annual Report*

*2006-2007*

*Tennessee Technological  
University*

# *Graduate School*

## *Administration and Staff*

Dr. Francis O. Otuonye, Associate Vice President for Research & Graduate Studies

Denise Anderson, Graduation Analyst  
Shelia Kendrick, Coordinator  
Kathy Reynolds, Secretary III  
Sue Smith, Executive Aide  
Becky Stafford, Transcript Analyst

### **Vision of the Graduate School**

The vision of the Graduate School is to improve human knowledge through teaching, learning, research, and outreach.

### **Mission of the Graduate School**

The Mission of the Graduate School is to promote, coordinate, enhance the quality of, and serve as an advocate for graduate education programs at Tennessee Technological University.

**Core Value:** Academic excellence through critical thinking skills, lifelong learning, and promotion of diversity.

### **Goals**

- ❑ Enhance the intellectual community of scholars among graduate students and faculty.
- ❑ Provide quality control for all graduate education programs.
- ❑ Promote the academic excellence of all graduate programs.
- ❑ Support and facilitate research, including scholarly and creative activities.

# Graduate Programs

Tennessee Technological University is authorized to offer master's degree programs in five colleges or schools, specialist's programs in the College of Education, and doctoral programs in the Colleges of Arts & Sciences, Education, and Engineering.

COLLEGE/SCHOOL	MAJOR AREA	CONCENTRATION	DEGREE
<b>Arts &amp; Sciences</b>	Biology	Fisheries Management General	M.S.
	Chemistry		M.S.
	Computer Science	Internet-based Computing	M.S.
	English		M.A.
	Mathematics	Applied Mathematics Mathematics Statistics	M.S.
	Environmental Sciences	Biology Chemistry	Ph.D.
<b>Business Administration</b>	Business Administration	Accounting Distance MBA General Management International Business Management Information Systems Risk Management and Insurance	M.B.A.
<b>Education</b>	Curriculum & Instruction	Curriculum Early Childhood Education Elementary Education Library Science (M.A. only) Reading Secondary Education Special Education	M.A./Ed.S.
	Educational Psychology & Counselor Education	Agency Counselor Educational Psychology Mental Health Counselor (M.A. only) School Counselor School Psychology	M.A./Ed.S.
	Exceptional Learning	Applied Behavior Analysis Literacy Program Planning & Evaluation	Ph.D.
	Exercise Science, Physical Education and Wellness	Elementary & Middle School Physical Education Lifetime Wellness Adapted Physical Education	M.A.
	Instructional Leadership		M.A./Ed.S.
<b>Engineering</b>	Chemical Engineering		M.S.
	Civil Engineering	Environmental Engineering Structural Engineering Transportation Engineering	M.S.
	Electrical Engineering	Communications Theory & Electronics Computers & Digital Systems Electromagnetic Fields & Physical Electronics Networks & Control Systems Nuclear Systems Power Systems & Energy Conversion	M.S.
	Mechanical Engineering	Acoustics Control Systems Design/Mechanical Systems Thermal Science/Systems Materials	M.S.
	Engineering	Individual Programs	Ph.D.
<b>RODP Programs</b>	Advanced Studies in Teaching and Learning		M.Ed.
	Master of Professional Studies	Strategic Leadership	M.P.S.
	Nursing	Nursing Education Nursing Administration Nursing Informatics Family Nurse Practitioner	M.S.N.

# Graduate School Executive Committee

## 2006-2007 Committee Members

Dr. Rafal Ablamowicz  
 Dr. Pedro Arce  
 Ms. Ashby Axelgard  
 Dr. J. P. Barfield  
 Dr. Jon Booker  
 Mr. Troy Brachey  
 Dr. Dan Combs  
 Dr. Subramaniam Deivanayagam, Chairperson  
 Dr. Susan Elkins  
 Dr. Dennis George  
 Dr. Sheila Green  
 Mr. Audley Grey  
 Dr. Sharon Huo  
 Dr. Virginia Moore  
 Dr. Robert Niebuhr  
 Dr. Francis Otuonye, executive officer  
 Dr. Larry Peach  
 Ms. Sarah Pierce  
 Dr. Paul Semmes  
 Dr. John Wheeler  
 Dr. Dale Wilson  
 Dr. Bob Wood

## Committee Role and Membership

Policies that govern the organization and administration of the Graduate School are developed by the Graduate School Executive Committee. As authorized by the Administrative Council of the University, the membership of this committee includes a minimum of eight faculty members, representing the four colleges in which graduate programs are offered; a minimum of seven administrators, to include representation from each of the four colleges; a minimum of four student members, also representing the four colleges; and such non-voting advisory members as may be determined by the President of the University. The Dean of Graduate Studies serves as executive officer. All appointments are made by the President. The chairperson of the committee is elected annually.

## 2005-2006 Meeting Dates

July 11, 2006	February 6, 2007
September 5, 2006	March 13, 2007
October 3, 2006	April 10, 2007
November 7, 2006	

## Committee Actions

The executive committee met seven times. The following actions were taken:

- Approved a concentration of International Business for the MBA program.
- Modified the admission requirements for Nondegree students to allow the submission of verification of degree with application and then have the official transcripts submitted before the end of the first semester of enrollment.
- Approved the use of an "Incomplete Grade Point Form" to be completed by the instructor before assigning an Incomplete grade.
- Approved new Probation and Dismissal for Unsatisfactory Performance policies.
- Approved a request from the Department of Counseling and Psychology for an exception of the written examination after the completion of 15 semester hours in the Ed.S. program.
- Approved a request from the School of Nursing for clarification on their grading policy and required GPA.
- Approved a request from the College of Education to change the name of its Ph.D. program from a Ph.D. in Exceptional Learning to a Ph.D. in Education, pending approval also from TBR. However, TBR did not approve the request.
- Approved a request from the College of Education to reconfigure two of the four concentrations within the Ph.D. program.
- Approved modifications of the Purpose and Scope of the Graduate School Executive Committee Procedures.
- Approved a request from the Department of Electrical and Computer Engineering to change the requirements of the M.S. degree nonthesis option.
- Approved a request from the Department of Curriculum and Instruction to permit a maximum of three semester hours of departmentally approved 5000-level credit in an Ed.S. program of study.
- Approved a request from the Division of M.B.A. Studies to modify their Quality of Work requirement
- Approved a request from the Department of Health and Physical Education to change the name of their department to the Department of Exercise Science, Physical Education and Wellness.
- Approved special requests from four students: (1) waiving requirement of two Bridge courses for the MSN program; (2) counting more than 9 hours of Special Standing credit for degree purposes; (3) requests for removing 3 Incomplete grades older than one year.
- Approved extensions of time limits for 24 students.
- Approved course additions, deletions, or changes in 15 departments, divisions, or schools.
- Elected Dr. Subramaniam Deivanayagam as chairperson for the 2006-2007 academic year.

# Graduate Faculty

## New Full Memberships

A full member of the Graduate Faculty shall have: an earned doctorate or equivalent terminal degree in an appropriate discipline; achieved professorial rank in the discipline relevant to the degree; achieved an appropriate level of scholarship and erudition characterized by honesty, accuracy, critical ability and thoroughness; and demonstrated (by involvement in institutional activities) his or her commitment to the academic community and the University, as well as to his or her students and academic discipline.

<b>Dr. J. B. Barfield</b> , D.A.	Assistant Professor of Exercise Science , Physical Education and Wellness
<b>Dr. Amy Chambers</b> , Ph.D.	Assistant Professor of Mathematics
<b>Dr. Wenzhong Gao</b> , Ph.D.	Assistant Professor of Electrical and Computer Engineering
<b>Dr. Melissa J. Geist</b> , Ed.D.	Assistant Professor of Nursing
<b>Dr. Sheila Green</b> , Ph.D.	Associate Professor of Nursing
<b>Dr. Laura Graves</b> , Ph.D.	Assistant Professor of Curriculum and Instruction
<b>Dr. Michael R. Mayton</b> , Ph.D.	Assistant Professor of Curriculum and Instruction
<b>Dr. Katherine E. Niebuhr</b> , Ed.D.	Assistant Professor of Counseling and Psychology
<b>Dr. Stephen Parke</b> , Ph.D.	Professor of Electrical and Computer Engineering
<b>Dr. Ambareen Siraj</b> , Ph.D.	Assistant Professor of Computer Science
<b>Dr. Melinda Swafford</b> , Ph.D.	Assistant Professor of Human Ecology
<b>Dr. Lisa Zagumny</b> , Ph.D.	Assistant Professor of Curriculum and Instruction

## New Associate Memberships

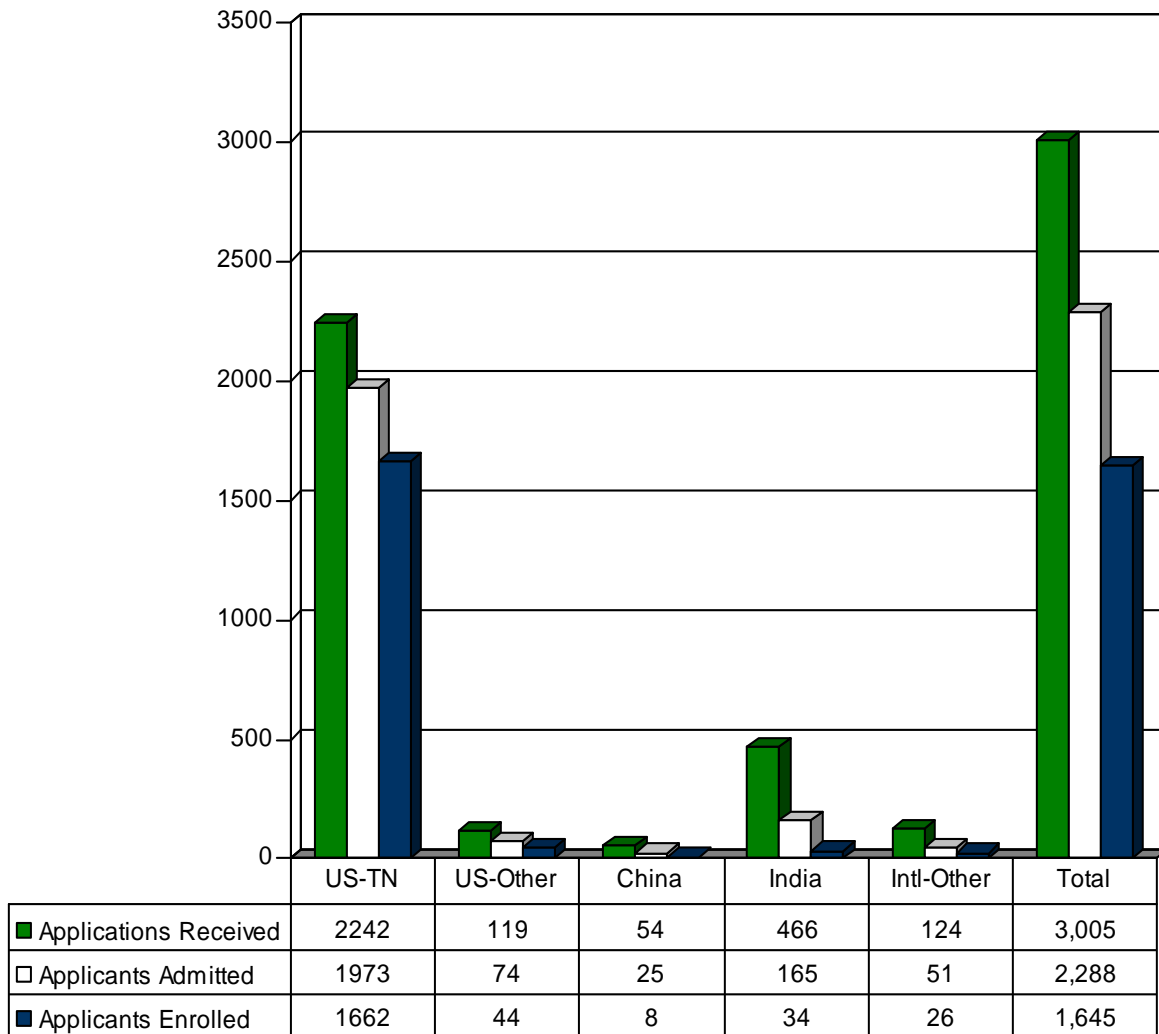
A faculty member who does not qualify for full membership on the Graduate Faculty may be appointed as an Associate Member on the basis of at least a master's degree and demonstrated specific competencies to carry out the departmental special needs for graduate teaching, advisement, or research.

<b>Mrs. Jane Baker</b> , M.Ed.	Instructor of Curriculum and Instruction
<b>Dr. Christy T. Carter</b> , Ph.D.	Assistant Professor of Biology
<b>Ms. Jennifer Golz</b> , M.A.	Instructor of English
<b>Dr. B. Bruce Greene</b> , Ph.D.	Professor of Animal Science
<b>Dr. Joshua Hauser</b> , D.M.A.	Associate Professor of Music
<b>Mr. O. Ray Jordan</b> , M.S.	Associate Professor of Biology
<b>Ms. Christine Koczwara</b> , M.A.	Professor of Art
<b>Dr. Sam Narimetla</b> , Ph.D.	Instructor of Mathematics
<b>Ms. Julie Stepp</b> , M.S.	Instructor of Curriculum and Instruction
<b>Dr. Henrienne G. Willard</b> , Ph.D.	Assistant Professor of Biology
<b>Dr. Jed A. Young</b> , Ph.D.	Assistant Professor of Agriculture

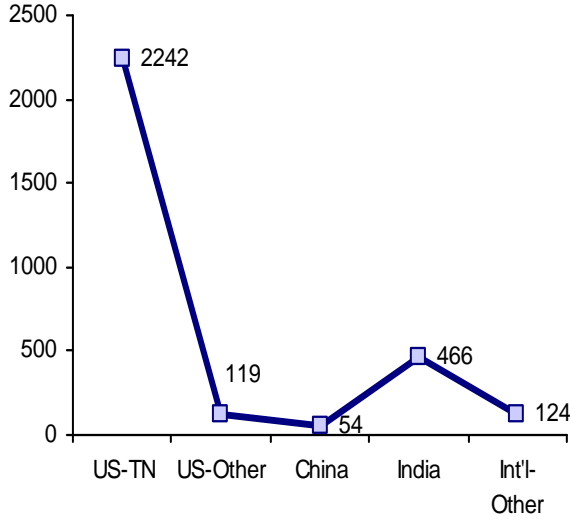
# Graduate Admissions

Interest in graduate study at Tennessee Technological University continues to grow. Tremendous energy is expended in the Graduate School to assist academic departments as efficiently and expediently as possible in recruiting, admitting, monitoring, and assuring the completion of graduate degrees for their students.

## Admissions 2006-2007



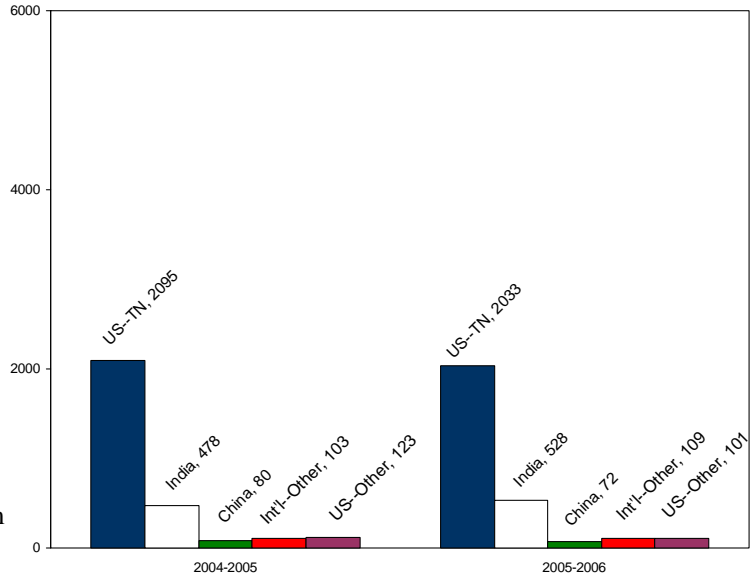
*Total Applications Received  
2005-2006 vs 2006-2007*



□ The International applications decreased slightly by 7.2% over 2005-2006. The applicants from India increased by 11% over the previous year.

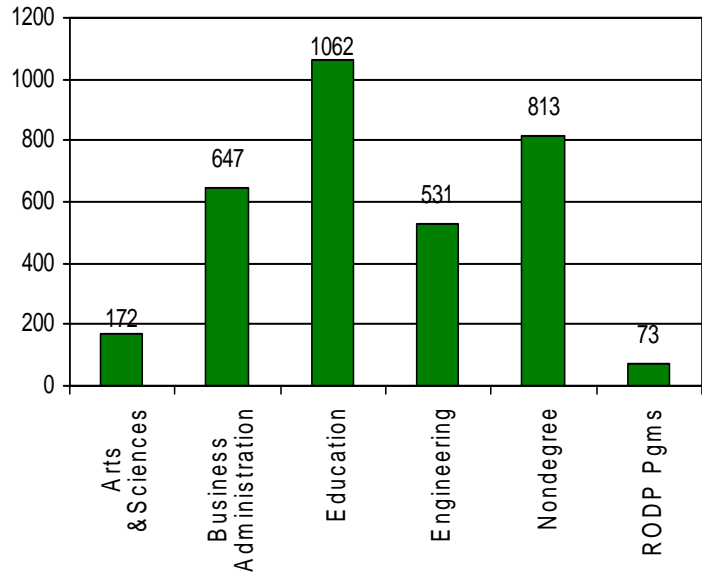
*Applications Received by Residence  
2005 - 2006*

- Of the 2,843 total applications received, 75.1% originated within the United States.
- Over 95% of the applications received from the United States were submitted by students within the state of Tennessee.
- Of the international applications received, 74.5% arrived from India, 10.1% were sent from China, with 15.4% were received from other countries.

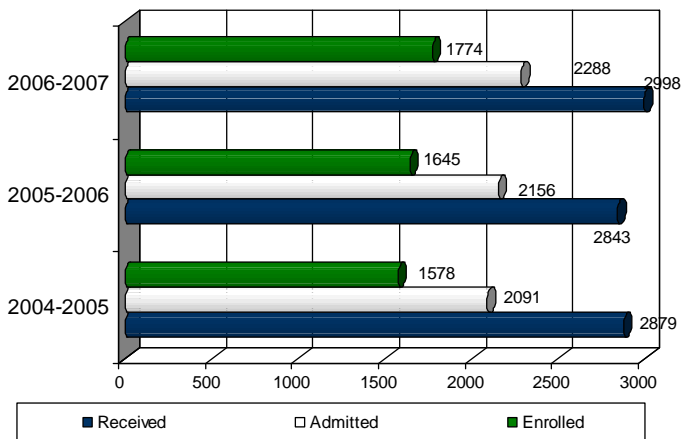


*Applications Received by Discipline  
2006-2007*

□ As can be seen in the graph to the right, 35.4% of all applications received are for majors in the College of Education.



*Applications Resulting in Admission  
and Enrollment  
2003-2006*

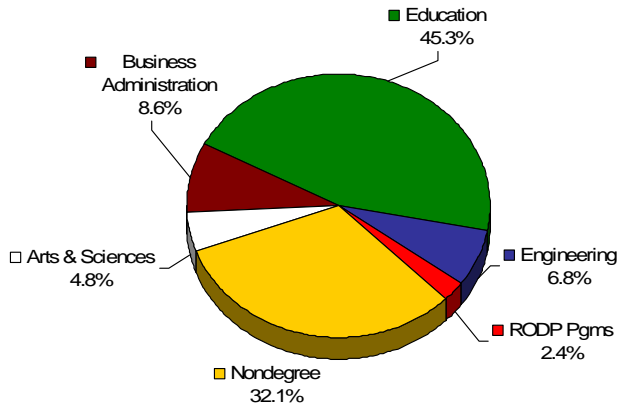


□ Of the 2,998 applications received during the 2006-2007 academic year, 76.3% resulted in admitted graduate students and 57.8% in enrolled students.

□ The number of applications, admissions, and enrolled applicants increased by 5.5%, 6.1%, and 7.8%, respectively.

# Graduate Enrollments

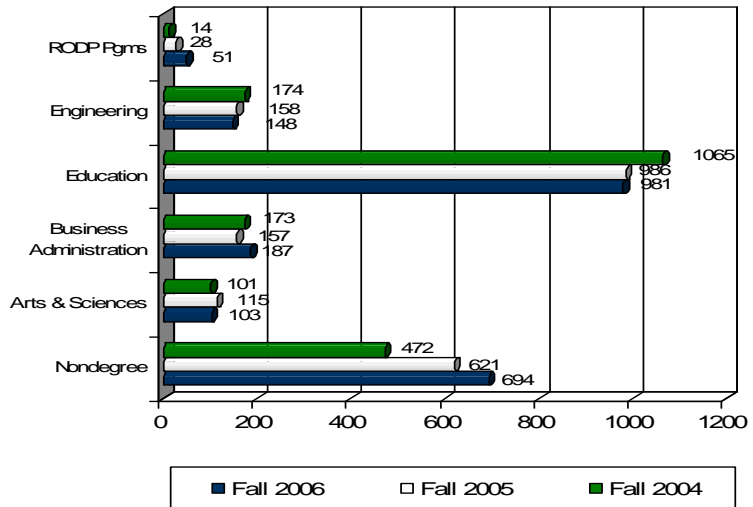
*Graduate Enrollment by College  
2006 Fall*



□ Nearly 50% of the graduate enrollment is in the College of Education.

*Enrollment Trends by College  
Fall Terms  
2004-2006*

- The College of Business Administration has shown the largest increase in enrollment in a degree program over 2005 Fall (19.1%).
- The RODP programs (M.Ed., M.P.S., and M.S.N.) showed an increase of 82.1% over the previous year.
- The College of Education shows a slight decrease of 0.5% over 2005.
- The College of Engineering continues to show a decrease of 6.7%.
- The College of Arts and Sciences saw a decrease in enrollment (11.7%).

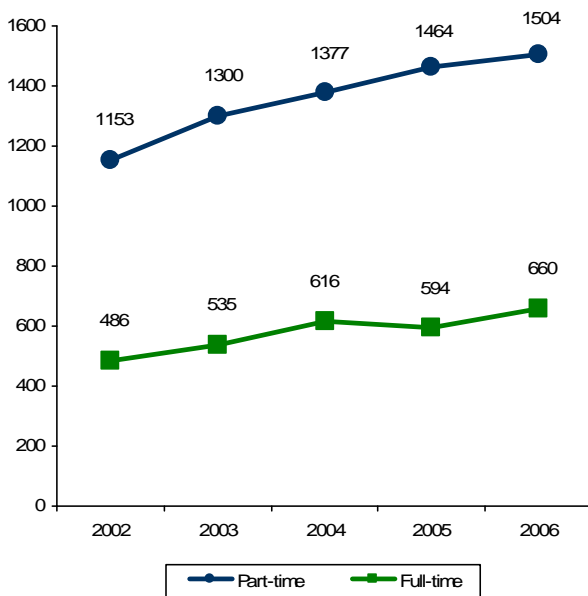


- Graduate student headcount increased 5.1% Fall 2005 and the FTE increased slightly (5.5%).

*Headcount vs. FTE Enrollment  
Fall Terms*



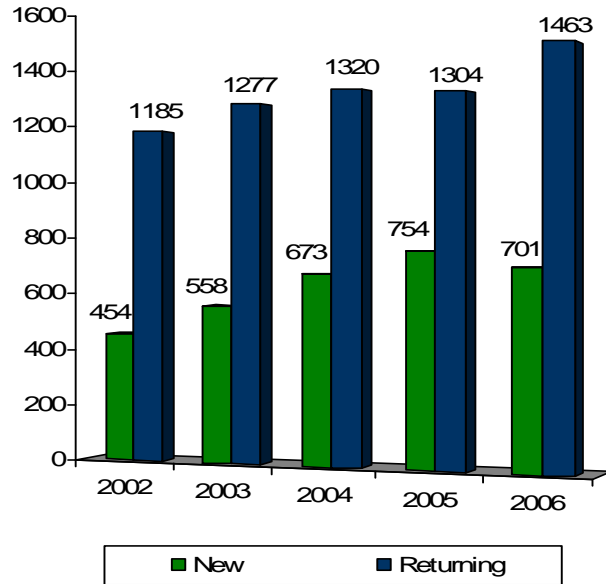
*Part-time vs. Full-time Enrollment  
Fall Terms*



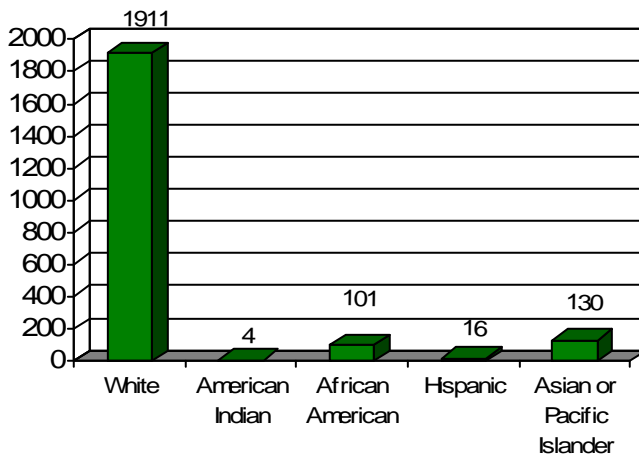
- Part-time enrollment has shown a 2.7% increase over the last year.
- Fulltime enrollment has shown an increase of 11.1% during the last year.

*New vs. Returning Student Enrollment  
Fall Terms*

□ The number of returning/continuing student enrollment increased by 12.2% over 2005. The new student number decreased in 2006 by 7.1%.



*Graduate Enrollment by Race  
2006 Fall*

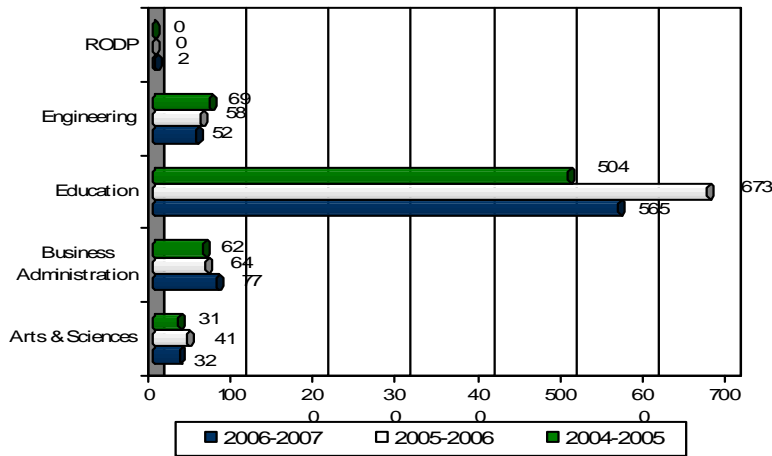


□ The graduate student enrollment is comprised of the following:

White	88.3%
Asian or Pacific Islander	6.0%
African American	4.7%
Hispanic	0.8%
American Indian	0.2%

# Graduate Degrees Conferred

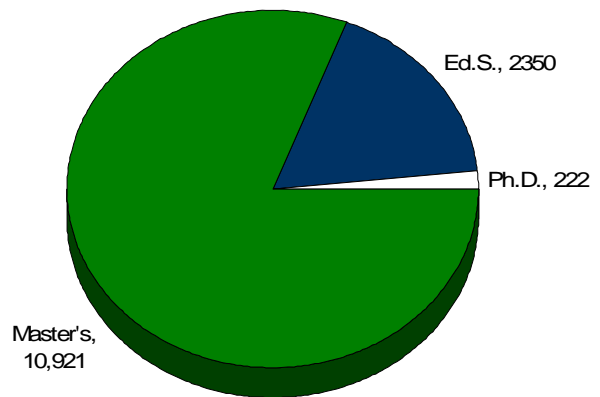
*By College*  
2004 - 2007



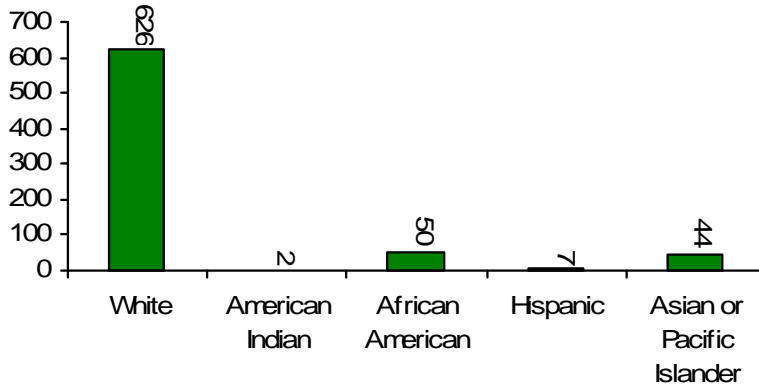
□ A comparison of the number of degrees conferred by each college for a three-year period may be seen to the left.

*By Degree Level*  
1959-2007

- Since the inception of graduate studies, TTU has conferred 13,493 graduate degrees.
- As seen graphically at the right, the master's level represents the largest area of degrees conferred to date.



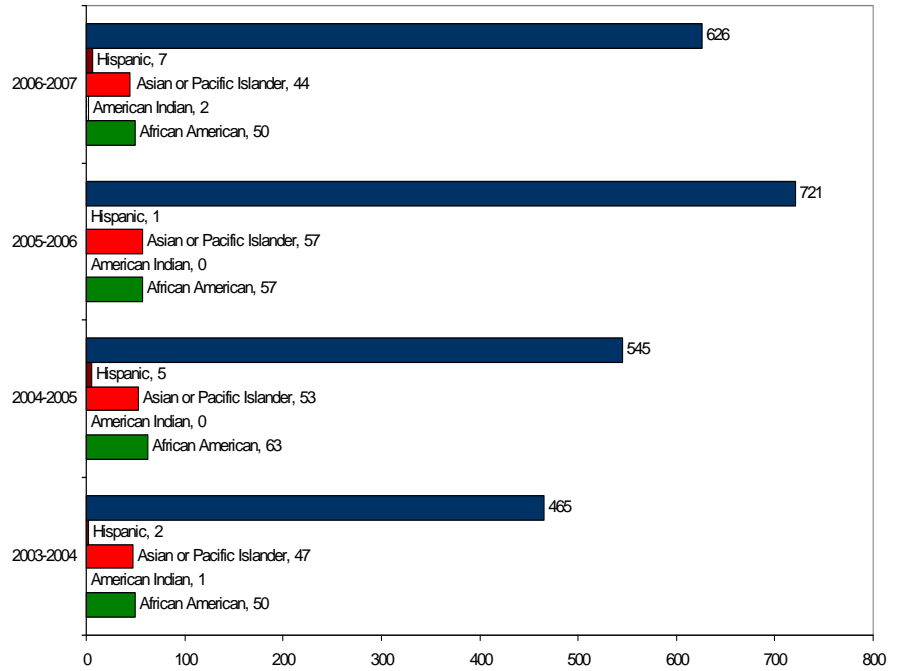
*Degrees Awarded  
By Race  
2006-2007*



□ The figure to the left shows the breakdown of the degrees awarded.

*By Race  
Four-Year Comparison  
2003-2004 through 2006-2007*

□ The number of degrees awarded to American Indians and Hispanics has increased slightly over 2005-2006.



# *Appendix A*

**GRADUATE SCHOOL CHARACTERISTICS**  
*Fall Terms 2002- 2006*

	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b>Total Enrollment</b>	1639	1835	1993	2058	2164
<b>(FTE)</b>	766	846	969	938	990
<hr/>					
Full-time	486	535	616	594	660
Part-time	1153	1300	1377	1464	1504
<hr/>					
<b>By Degree Sought</b>					
M.A.	622	624	697	646	585
M.B.A.	122	146	173	157	187
M.Ed.	0	0	6	6	13
M.P.S.	0	0	0	0	9
M.S.	185	201	197	188	173
M.S.N.	0	0	8	21	29
Ed.S.	227	286	340	310	373
Ph.D.	71	87	100	108	101
<hr/>					
<b>Nondegree</b>	412	491	472	621	694
<hr/>					
<b>By Gender</b>					
Male	545	609	651	619	648
Female	1094	1226	1342	1439	1516
<hr/>					
<b>By Residence</b>					
Tennessee	1455	1617	1765	1827	1949
Out-of-State	54	61	73	74	60
International	130	157	155	157	155
<hr/>					
<b>By Entry Status</b>					
New	454	558	673	754	701
Returning	1185	1277	1320	1304	1463
<hr/>					
<b>By Race</b>					
White	1436	1568	1715	1783	1911
American Indian	3	2	3	4	4
African American	69	106	122	110	101
Hispanic	5	8	6	9	16
Asian or Pacific Islander	126	149	147	152	130

**FALL TERM GRADUATE ENROLLMENTS**  
*Master's, Ed.S., and Ph.D. Levels*  
 2002-2006

<i>College/Major</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
<b>ARTS &amp; SCIENCES</b>					
Master's					
Biology (M.S.)	28	30	30	39	27
Chemistry (M.S.)	9	10	8	12	11
Computer Science (M.S.)*	3	9	22	18	15
English (M.A.)	16	17	17	20	19
Mathematics (M.S.)	13	10	11	13	15
Ph.D.					
Environmental Sciences	<u>16</u>	<u>16</u>	<u>13</u>	<u>13</u>	<u>16</u>
<b>Subtotals</b>	<b>85</b>	<b>92</b>	<b>101</b>	<b>115</b>	<b>103</b>
<hr/>					
<b>BUSINESS ADMINISTRATION</b>					
M.B.A.	<b>122</b>	<b>146</b>	<b>173</b>	<b>157</b>	<b>187</b>
<hr/>					
<b>EDUCATION</b>					
M.A.					
Curriculum & Instruction	177	208	219	180	196
Educational Psychology	89	77	80	69	56
Exer. Sci., Phys. Educ. & Wellness	8	20	27	28	44
Instructional Leadership	332	302	354	349	270
Ed.S.					
Curriculum & Instruction	8	24	28	24	31
Educational Psychology	30	37	24	33	22
Instructional Leadership	189	225	288	253	320
Ph.D.					
Exceptional Learning**	<u>24</u>	<u>28</u>	<u>39</u>	<u>43</u>	<u>42</u>
<b>Subtotals</b>	<b>857</b>	<b>921</b>	<b>1065</b>	<b>986</b>	<b>981</b>
<hr/>					
<b>ENGINEERING</b>					
M.S.					
Chemical	20	18	16	10	17
Civil	25	23	17	20	17
Electrical	41	52	55	45	37
Industrial	2	2	0	0	0
Mechanical	44	47	38	31	33
Ph.D.					
Engineering	<u>31</u>	<u>43</u>	<u>48</u>	<u>52</u>	<u>44</u>
<b>Subtotals</b>	<b>163</b>	<b>185</b>	<b>174</b>	<b>158</b>	<b>148</b>
<hr/>					
<b>REGENTS ONLINE DEGREE PROGRAMS</b>					
Adv. Studies in Teaching & Learning (M.Ed.)***			6	7	13
Nursing (M.S.N.)****			8	21	29
Master of Professional Studies (M.P.S.)*****					9
<hr/>					
<b>NONDEGREE</b>	<b>412</b>	<b>491</b>	<b>472</b>	<b>621</b>	<b>694</b>
<hr/>					
<b>TOTALS</b>	<b>1554</b>	<b>1835</b>	<b>1993</b>	<b>2058</b>	<b>2164</b>

\*The Computer Science program began 2002 Fall  
 \*\*The Exceptional Learning program began 2000 Fall

\*\*\*The Adv. Studies in Learning & Teaching Program began 2004 Summer  
 \*\*\*\*The Master of Science in Nursing Program began 2004 Fall  
 \*\*\*\*\*The Master of Professional Studies Program began 2006 Fall

**GRADUATE ENROLLMENT BY DEGREE LEVELS**  
*A Five-Year Comparison*  
 2002-2003 to 2006-2007

<i>585Year</i>	<i>Degree</i>	<i>Summer</i>	<i>Fall</i>	<i>Spring</i>
<b>2006-2007</b>	M.A.	456	585	581
	M.B.A.	129	187	176
	M.Ed.	4	13	14
	M.P.S.	0	9	11
	M.S.	82	173	177
	M.S.N.	16	29	25
	Ed.S.	289	373	387
	Ph.D.	78	101	94
	NDGR	<u>63</u>	<u>694</u>	<u>55</u>
	<b>Totals</b>	<b>1117</b>	<b>2164</b>	<b>1520</b>
<b>2005-2006</b>	M.A.	494	646	637
	M.B.A.	117	157	171
	M.Ed.	4	7	6
	M.S.	92	188	178
	M.S.N.	12	21	21
	Ed.S.	317	310	327
	Ph.D.	80	108	106
	NDGR	<u>47</u>	<u>621</u>	<u>118</u>
		<b>Totals</b>	<b>1163</b>	<b>2058</b>
<b>2004-2005</b>	M.A.	473	697	696
	M.B.A.	91	173	139
	M.Ed.	3	6	4
	M.S.	110	197	184
	M.S.N.	0	8	13
	Ed.S.	218	340	350
	Ph.D.	72	100	99
	NDGR	<u>34</u>	<u>472</u>	<u>86</u>
		<b>Totals</b>	<b>1001</b>	<b>1993</b>
<b>2003-2004</b>	M.A.	441	622	623
	M.B.A.	90	146	130
	M.S.	120	201	200
	Ed.S.	232	286	283
	Ph.D.	51	87	92
	NDGR	<u>41</u>	<u>491</u>	<u>67</u>
		<b>Totals</b>	<b>975</b>	<b>1835</b>
<b>2002-2003</b>	M.A.	516	622	588
	M.B.A.	75	122	129
	M.S.	105	185	194
	Ed.S.	178	227	272
	Ph.D.	49	71	70
	NDGR	<u>23</u>	<u>412</u>	<u>59</u>
		<b>Totals</b>	<b>946</b>	<b>1639</b>

**GRADUATE DEGREES CONFERRED BY COLLEGE**  
A Three-Year Comparison

<i>College/Major</i>	<i>2004-2005</i>			<i>2005-2006</i>			<i>2006-2007</i>		
	<i>Sum.</i>	<i>Fall</i>	<i>Spr.</i>	<i>Sum.</i>	<i>Fall</i>	<i>Spr.</i>	<i>Sum.</i>	<i>Fall</i>	<i>Spr.</i>
<b>ARTS &amp; SCIENCES</b>									
Biology (M.S.)	2	5	2	5	3	9	3	1	7
Chemistry (M.S.)	2	1	2	1	1	1	1	1	2
Computer Science (M.S.)	0	1	6	5	2	1	3	0	1
English (M.A.)	2	1	1	2	2	4	1	1	5
Math (M.S.)	0	2	1	0	2	3	1	1	4
Ph.D.									
Environmental Sciences	<u>1</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Subtotals</b>	<b>6</b>	<b>11</b>	<b>14</b>	<b>13</b>	<b>10</b>	<b>18</b>	<b>9</b>	<b>4</b>	<b>19</b>
<b>BUSINESS ADMIN.</b>									
M.B.A.	<b>6</b>	<b>41</b>	<b>15</b>	<b>31</b>	<b>17</b>	<b>16</b>	<b>31</b>	<b>32</b>	<b>14</b>
<b>EDUCATION</b>									
M.A.									
Curr. & Instruction	27	16	29	40	7	27	19	16	19
Educ. Psychology	8	14	11	4	7	11	7	6	16
Ex. Sci., Phys.Ed., Well.	1	2	5	3	1	5	5	1	10
Instruct. Leadership	113	28	62	113	47	109	91	35	56
M.Ed.									
Adv. Stu. Tchg. & Lrng.	0	0	0	0	0	2	0	0	2
Ed.S.									
Curr. & Instruction	2	1	3	2	0	1	2	2	4
Educ. Psychology	7	0	6	3	7	9	1	3	8
Instruct. Leadership	88	24	54	137	33	99	78	35	139
Ph.D.									
Exceptional Learning	<u>0</u>	<u>2</u>	<u>1</u>	<u>5</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>7</u>	<u>4</u>
<b>Subtotals</b>	<b>246</b>	<b>87</b>	<b>171</b>	<b>307</b>	<b>103</b>	<b>263</b>	<b>204</b>	<b>105</b>	<b>258</b>
<b>ENGINEERING</b>									
M.S.									
Chemical	4	3	4	3	2	0	1	2	1
Civil	3	7	3	2	2	3	0	4	5
Electrical	7	10	4	8	12	3	9	5	3
Industrial	0	0	0	0	0	0	0	0	0
Mechanical	7	6	3	6	7	3	8	2	2
Ph.D.									
Engineering	<u>3</u>	<u>4</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>2</u>	<u>3</u>	<u>5</u>	<u>2</u>
<b>Subtotals</b>	<b>24</b>	<b>30</b>	<b>15</b>	<b>21</b>	<b>26</b>	<b>11</b>	<b>21</b>	<b>18</b>	<b>13</b>
<b>NURSING</b>									
M.S.N.	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>TOTALS</b>	<b>282</b>	<b>169</b>	<b>215</b>	<b>372</b>	<b>156</b>	<b>308</b>	<b>265</b>	<b>159</b>	<b>305</b>

**GRADUATE DEGREES CONFERRED TO DATE**  
1959-2006

<i>Year</i>	<i>Master's</i>	<i>Specialist</i>	<i>Doctoral</i>
1959-1965	96		
1965-1966	31		
1966-1967	60		
1967-1968	88		
1968-1969	109		
1969-1970	124		
1970-1971	198		
1971-1972	203	7	
1972-1973	257	6	
1973-1974	217	18	2
1974-1975	247	20	1
1975-1976	260	30	4
1976-1977	240	23	3
1977-1978	205	13	1
1978-1979	253	25	1
1979-1980	222	41	3
1980-1981	277	31	2
1981-1982	229	26	2
1982-1983	196	36	4
1983-1984	208	26	6
1984-1985	252	31	4
1985-1986	213	32	2
1986-1987	178	35	7
1987-1988	206	32	5
1988-1989	298	46	6
1989-1990	264	19	8
1990-1991	185	35	4
1991-1992	247	44	7
1992-1993	221	36	7
1993-1994	231	50	15
1994-1995	269	44	8
1995-1996	268	64	9
1996-1997	284	43	11
1997-1998	333	69	3
1998-1999	334	80	8
1999-2000	348	91	4
2000-2001	392	101	5
2001-2002	414	117	7
2002-2003	448	158	15
2003-2004	382	174	9
2004-2005	467	185	14
2005-2006	532	291	13
2006-2007	<u>435</u>	<u>272</u>	<u>22</u>
<b>TOTALS</b>	<b>10,921</b>	<b>2350</b>	<b>222</b>

## *Appendix B*

# *Dissertations and Theses*

## *July 1, 2006—June 30, 2007*

### **DISSERTATIONS**

- Al-Khatib, Omar J.** “Vibration of a Paraboloidal Shells.” December 2006. Engineering. (Dr. George Buchanan)
- Burnette, A. Megan.** “Factors Influencing the Decision-Making Processes of Parents for the Educational Placement of Their Children who are Deaf.” December 2006. Exceptional Learning. (Dr. D. Dean Richey)
- Cecil, Misty J.** “The Relationship Between Student Responses on the National Survey of Student Engagement (NSSE) and Performance on the Critical-Thinking Assessment Test (CAT).” December 2006. Exceptional Learning. (Dr. Barry Stein)
- Cothran, Jacqueline Ann Lane.** “Efficacy of a Selection of Reading Interventions for Low Socioeconomic African American Students by Ability and Grade Levels K-3.” December 2006. Exceptional Learning. (Dr. David Larimore and Dr. Deborah Setliff)
- Ennise, Theresa Regna.** “Assessing and Enhancing Critical Thinking Skills: Enhanced Peer Review (EPR) with the CAT Instrument.” May 2007. Exceptional Learning. (Dr. Barry Stein)
- Graves, Laura Marie.** “Multiple High-Stakes Testing Impacts of Rural, Micropolitan, and Urban Tennesseans over Time and Pertinent Demographics.” August 2006. Exceptional Learning. (Dr. David Larimore and Dr. Deborah Setliff)
- Helm, R. Brandon.** “An Analysis of a Self-Determination Treatment Model Promoting Increased Task Engagement of Students with Disabilities.” December 2006. Exceptional Learning. (Dr. John Wheeler)
- Huang, Xiuchang Ann.** “Pursuing a Diagnosis for Children with Asperger Syndrome: Parents’ Perspectives.” May 2007. Exceptional Learning. (Dr. John Wheeler)
- Jillella, Nagarjuna V.** “Modeling of Wrinkling of Thin Circular Sheets.” December 2006. Engineering. (Dr. John Peddieson, Jr.)
- Little, Tonia Ann.** “The Effects of the Wilbarger Protocol on Task Engagement in a Child with Asperger’s Syndrome.” December 2006. Exceptional Learning. (Dr. John Wheeler)
- Manna, Tapan K.** “Impulse Impedance of Grounding Systems and Its Effects on Tower Crossarm Voltage.” August 2006. Engineering. (Dr. Pritindra Chowdhuri)
- Maxwell, Ina Frasier.** “Lessons Learned from Motivated Readers: A Case Study of Four Ten-Year-Olds.” May 2007. Exceptional Learning. (Dr. John Wheeler and Dr. Deborah Setliff)
- Ou, Li.** “Design of a High Performance and High Availability Distributed Storage System.” December 2006. Engineering. (Dr. Xubin He)

- Pallem, Chandralekha.** “Modeling of Lightning Stroke to Flat Earth.” August 2006. Engineering. (Dr. Pritindra Chowdhuri)
- Roberts, Richard Adam.** “Modeling of the Turbulent Wake Behind Streamlined Bodies.” August 2006. Engineering. (Dr. Jie Cui)
- Shukla, Meera.** “A Comprehensive Approach to Reactive Power Scheduling in Restructured Power Systems.” May 2007. Engineering. (Dr. Ghadir Radman)
- Simpson, Kathy Tiller.** “Effects on Academic Achievement of Small Learning Communities by Student Ability Level, Race, and Gender.” December 2006. Exceptional Learning. (Dr. David Larimore and Dr. Deborah Setliff)
- Stone, Tena M.** “Structure and Predictors of Teacher Perceptions of Tennessee’s Alternate Assessment Portfolio.” December 2006. Exceptional Learning. (Dr. David Larimore)
- Syed, Azam Mohiuddin.** “A Study of Thermal Behavior of Fibrous Insulation.” May 2007. Engineering. (Dr. Ahmed ElSawy and Dr. Sastry Munukutla)
- Unterstein, Jenny Lynn.** “Predicting Violent Behavior in Juvenile Offenders.” May 2007. Exceptional Learning. (Dr. John Wheeler)
- Wang, Yongqing.** “Aluminide Coatings on Fe-9Cr-1Mo Steel Synthesized by Pack Cementation for Power Generation Applications.” December 2006. Engineering. (Dr. Ying Zhang)
- Wu, Zhiqiao.** “An Investigation of Dual Stator Winding Induction Machines.” December 2006. Engineering. (Dr. Joseph Ojo)

## ***THESES***

- Abernathy, Andrew Clayton.** “Population Status and Environmental Correlates of the Rare Striated Darter, *Etheostoma striatulum*, in the Duck River System, Tennessee.” May 2007. Biology. (Dr. Hayden Mattingly)
- Adkar, Rishikesh Sudheer.** “Compensation of Induction Motor Load in a Power System Using Fixed Capacitor and STATCOM.” December 2006. Electrical Engineering. (Dr. Ghadir Radman)
- Amaldoss, Arul Prakash.** “Free Vibration Analysis of Elasto-Electro-Magnetic Plate by Discrete Layer Approximation Theory.” August 2006. Mechanical Engineering. (Dr. Guillermo Ramirez and Dr. John Peddieson, Jr.)
- Ashton, Matthew J.** “Distribution and Microhabitat Use of the Threatened Snail Darter (*Percina tanasi*) in the Tennessee River Drainage.” May 2007. Biology. (Dr. James Layzer)
- Baker, James Matthew.** “The Free Vibration of a Cylinder-Cone-Cylinder Shell Combination.” December 2006. Civil Engineering. (Dr. Jane Liu)
- Batiste, Jeremiah W.** “Image-Based Strain Analysis on Cement-Based Materials.” August 2006. Chemical Engineering. (Dr. Joseph Biernacki)

- Benton, Paul Daniel.** “Swimming Performance of the Barrens Topminnow and Western Mosquitofish: Implications for Barrier Design and Topminnow Conservation.” May 2007. Biology. (Dr. Hayden Mattingly)
- Black, Tyler R.** “Population Densities and Performance of Predictive Habitat Models for the Threatened Blackside Dace (*Phoxinus Cumberlandensis*).” May 2007. Biology. (Dr. Hayden Mattingly)
- Brown, Eric L.** “RFID Enhanced Authentication for Distributed Digital Records Access.” August 2006. Computer Science. (Dr. Michael Rogers)
- Byard, Benjamin Edwin.** “High Fines Limestone Screenings as Fine Aggregate for Precast Portland Cement Concrete.” May 2007. Civil Engineering. (Dr. L. K. Crouch)
- Calderon, Martha A.** “Time-Reversed MIMO for Ultra-Wideband Communications: Experiments and Performance.” December 2006. Electrical Engineering. (Dr. Robert Qiu)
- Chen, Xin.** “L2 Cache Performance Evaluation and I/O Improvement of Multi-Core Architectures.” May 2007. Electrical Engineering. (Dr. Xubin He)
- Chlarson, Daniel Lee.** “Towards Uniformly Distributed Compliance in Compliant Mechanisms: A Multi-Objective Approach.” May 2007. Mechanical Engineering. (Dr. Stephen Canfield)
- Ciuffetelli, AnaLisa.** “Culture Shaping Identity in *The House on Mango Street*, *How The Garcia Girls Lost Their Accents*, and *Dreaming in Cuban*.” May 2007. English. (Dr. Josephine McQuail)
- Daniels, Jared Carson.** “Two Alternative Proofs of a Matroid Reconstruction Result.” May 2007. Mathematics. (Dr. Allan Mills)
- Desai, Amol S.** “Topology Optimization of Compliant Mechanisms for Distributed Compliance.” August 2006. Mechanical Engineering. (Dr. Stephen Canfield)
- De Silva, Nanayakkara W. S. V. Nuwan.** “Theoretical Studies of Thiosemicarbazones and Hydrofluorocarbons.” May 2007. Chemistry. (Dr. Titus Albu)
- Douangvilay, Siphay David.** “The Free Vibration of Infinitely Long Cylindrical Shells with Bézier Cubic Cross Sections Using the Gröbner Basis Method.” December 2006. Civil Engineering. (Dr. Jane Liu)
- Dye, Gregory T.** “Flexible GMR Based Measurement System for Transmission Line Footing Resistance.” August 2006. Electrical Engineering. (Dr. Satish Mahajan)
- Easterly, Melissa A.** “Fluorescence Mapping of Dissolved Organic Matter (DOM) in Surface Water, Drinking Water, and Wastewater.” December 2006. Chemistry. (Dr. Martha Wells)
- Fortenberry, Carie A.** “New Insights into the Use of  $\beta$ -Chloro-Alanine in the Tryptophan Synthase Kinetic Assay.” August 2006. Chemistry. (Dr. Jeffrey Boles)
- Funmilayo, Ololade T.** “Performance Analysis of iSCSI Communication.” December 2006. Electrical Engineering. (Dr. Xubin He)
- Gourabathini, Poornima.** “Interactions Between Foodborne Pathogens and Protozoa Isolated from Lettuce and Spinach.” August 2006. Biology. (Dr. Sharon Berk)

- Gupta, Aditya.** “Contact Problems on Multilayered Elasto-Electro-Magnetic Half-Planes.” August 2006. Mechanical Engineering. (Dr. Guillermo Ramirez and Dr. John Peddieson, Jr.)
- Hari, Murali Krishna.** “Survivability in Layer 1 VPN Networks.” August 2006. Electrical Engineering. (Dr. Nasir Ghani)
- Harris, Amanda Lynn.** “Investigating the Optimal Configuration of Hydrologic Models during Data-Denial Situations Using Satellite Rainfall Data.” May 2007. Civil Engineering. (Dr. Faisal Hossain)
- Hewitt, Ryan D.** “Estimating Pervious PCC Pavement Design Inputs with Compressive Strength and Effective Void Content.” December 2006. Civil Engineering. (Dr. L. K. Crouch)
- Hodges, Bennie Clayton.** “Application of Category Theory to Basic Principles of Automata Theory.” May 2007. Mathematics. (Dr. Rafal Ablamowicz)
- Holbrook, Chad.** “An Assessment of Potential Spawning Habitat, Length at Maturity, and Fecundity of Brown Trout in Tennessee Tailwaters.” August 2006. Biology. (Dr. Phillip Bettoli)
- Howell, Danny M.** “Text and Background Color and Reading Comprehension.” May 2007. Educational Psychology and Counselor Education. (Dr. David Larimore)
- Jeedigunta, Manjeera.** “Performance Evaluation of the MerMaid-SIG Algorithm for Independent Component Analysis.” August 2006. Electrical Engineering. (Dr. P. K. Rajan)
- Jones-Beasley, Natae.** “Body Image Differences Between African American Women and Caucasian Women When Presented with Visual Stimuli.” May 2007. Educational Psychology and Counselor Education. (Dr. Janet Turner)
- Kandi, Sujatha.** “Discontinuity and Shock Layer Propagation in One-Dimensional Two Phase Flow.” August 2006. Mechanical Engineering. (Dr. John Peddieson, Jr.)
- Kerns, Janice A.** “Delayed Mortality and Movements of Paddlefish Released as Bycatch in the Lower Tennessee River.” December 2006. Biology. (Dr. Phillip Bettoli)
- Knight, Seth.** “Concepts and Experiments on Capture with Momentum Exchange Electrodynamic Reboost Space Tethers.” August 2006. Mechanical Engineering. (Dr. Stephen Canfield)
- Kok, Mehmet Ata.** “Multi-Domain Hierarchical Routing in Opto-Electronic DWDM Networks.” May 2007. Electrical Engineering. (Dr. Nasir Ghani)
- Kurowski, Nicholas James.** “Highly Scalable RC5 Cryptoprocessor Architecture.” May 2007. Electrical Engineering. (Dr. Roger Haggard)
- Lewis, Rebeca Virginia.** “Sufficient Conditions for a Finite Semiring to be a Ring.” May 2007. Mathematics. (Dr. Andrew Hetzel)
- Madhavapeddy, Sirisha.** “Free Vibration Analysis of Complete Isotropic Toroidal Shells with Elliptical Cross Section.” December 2006. Mechanical Engineering. (Dr. John Peddieson, Jr.)
- Makweche, Plaxedes.** “Simazine Removal Using Sphagnum Peatmoss in Mesocosms Simulating Subsurface Flow Constructed Wetlands.” August 2006. Biology. (Dr. G. Kim Stearman)
- Meadors, Viola Mae.** “Extraction of Cesium using Functionalized Calix[4]arene-Benzocrown-6 Ethers.” May 2007. Chemistry. (Dr. Dale Ensor)

- Mogili, Sandeep.** “Numerical Study of Turbulent Flow in a Tangentially Injected Swirl Generator.” August 2006. Mechanical Engineering. (Dr. Jie Cui)
- Nissankarao, Raghuram.** “Study of Behavior of Layered and Multiphase Magneto-Electro-Elastic Plates.” August 2006. Mechanical Engineering. (Dr. John Peddieson, Jr., and Dr. George Buchanan)
- Norris, Marshall A.** “Development and Validation of a Dynamic Model for the MXER Quadtrap Capture Mechanism.” December 2006. Mechanical Engineering. (Dr. Stephen Canfield)
- O’Neal, Barry.** “A Novel Technique to Reduce Unwanted Carrier Harmonics in Class-D Amplifiers.” August 2006. Electrical Engineering. (Dr. Sundaram Natarajan)
- Orr, Jessica.** “Effects of Eurasian Collared-Doves on Populations of Mourning Doves and Other Species in the Southeastern U.S.” May 2007. Biology. (Dr. Steven Hayslette)
- Patel, Keyurbhai.** “Determination of Optimal Generation Schedule with Fixed Inter-area Power Exchange Using Line-Flow-Based Power Flow Equations.” August 2006. Electrical Engineering. (Dr. Ghadir Radman)
- Patil, Darpan D.** “Characterization of Capacitive Sensors and Monitoring of Metal Fill in Lost Foam Casting.” December 2006. Electrical Engineering. (Dr. Mohamed Abdelrahman)
- Payne, Jonathan Edgar.** “Differences in Recall of Information Presented Traditionally and Through Web-Based Programs in a Classroom Setting.” May 2007. Educational Psychology and Counselor Education. (Dr. Jann Cupp)
- Penmetsa, Sunitha.** “An Analysis of the Equations Governing Molecular Diffusion.” May 2007. Civil Engineering. (Dr. George Buchanan)
- Potukuchi, Kartik.** “Efficient Numerical Solvers for Li-Ion Batteries.” December 2006. Chemical Engineering. (Dr. Venkat Subramanian)
- Price, Adam Lee.** “Assessment of Six Shear Design Methods for Precast Prestressed Concrete Bridge Beams.” December 2006. Civil Engineering. (Dr. Xiaoming Sharon Huo)
- Raj, Preethi.** “Error Budget Analysis of Hydrologic Models: Understanding Applications for Satellite Rainfall Data.” May 2007. Civil Engineering. (Dr. Faisal Hossain)
- Raje, Reshma.** “A Comparison of Transient Stability for Power Systems Compensated with Both SSSC and STATCOM Against the Use of a Single UPFC.” August 2006. Electrical Engineering. (Dr. Ghadir Radman)
- Sasikumar, Murali Mohan.** “A ‘Single Point’ Tower Footing Resistance Measurement System Using Spin Dependent Tunneling Sensors.” August 2006. Electrical Engineering. (Dr. Satish Mahajan)
- Schmidt, Christina Ursula.** “Seasonal Microhabitat Use of the Threatened Spotfin Chub *Erimonax Monachus* in the Emory River Watershed.” May 2007. Biology. (Dr. S. Bradford Cook)
- Sharma, Uday.** “Development of Power System Courseware with An Embedded Intelligent Tutor.” December 2006. Electrical Engineering. (Dr. Arun Sekar)
- Stacy, Justin Patrick.** “Synthesis and Oxidation Behavior of ‘Simple’ and ‘Modified’  $\gamma+\gamma$  Two-Phase Coatings.” May 2007. Mechanical Engineering. (Dr. Ying Zhang)

- Starnes, Gary.** “An Investigation of Numerical Methods for Approximating the Laplace Transform and the Inversion Integral.” December 2006. Mathematics. (Dr. Brian O’Connor)
- Tinch, Clair Elizabeth.** “Differences in Selective Attention between Elementary Students from Traditional Families and Students from Non-Traditional Families.” May 2007. Educational Psychology and Counselor Education. (Dr. Jann Cupp)
- Van Neste, Charles William.** “A New Method for Collection of Molecular Vapor Using DC Corona Discharge.” August 2006. Electrical Engineering. (Dr. Satish Mahajan)
- Vaughn, Carey Aitken.** “A Comparison of Pre-Oxidants at the Cookeville Water Treatment Plant—A Disinfection Byproduct Study.” May 2007. Civil Engineering. (Dr. L. K. Roberts)
- Vazrala, Anil Kumar.** “Sintering of Class F Fly Ash.” December 2006. Chemical Engineering. (Dr. Joseph Biernacki)
- Westhoff, Jacob Thomas.** “Barrens Topminnow Coexistence with Invasive Western Mosquitofish: The Potential Roles of Artificial Refuge and Species Density.” May 2007. Biology. (Dr. Hayden Mattingly)
- White, Neil T.** “Design and Development of a Wheeled, High Mobility Multiple-Axle Climbing Platform” August 2006. Mechanical Engineering. (Dr. Stephen Canfield)
- Wroblewski, Shannon Michael.** “Optimization of  $\text{Fe}_{0.25}\text{Si}_{1.75}$ -Graphite Composite Anodes for Li-Ion Batteries.” May 2007. Chemical Engineering. (Dr. Chungsheng Wang)

# 2006-2007 Historical Data

## Academic Terms

<i>Summer Semester 2006</i>		
	May 30	Registration
	August 5	Commencement
<i>Fall Semester 2006</i>		
	August 25	Registration
	December 16	Commencement
<i>Spring Semester 2007</i>		
	January 12	Registration
	May 5	Commencement

## Fees and Expenses

<i>Application Fee</i>	\$ 25.00	American Applicants
	\$ 30.00	International Applicants
<i>Graduate Tuition</i> (Payable by nonresidents of Tennessee)	\$421.00 per hour, maximum \$4847.00 per semester*	
<i>Graduate Maintenance Fee**</i> (Payable by all students)	\$319.00 per hour, maximum \$2916.00 per semester*	
<i>Thesis &amp; Dissertation Binding Fees</i>	\$10.00 per copy	
Postage	\$5.00 to U.S. addresses	
	\$6.00 to non-U.S. addresses	

\*Summer Semester Fees will be charged at the per-hour rates with no maximum amount.

\*\*Graduate fees are comprised of the following fees: maintenance, general access, debt service, and student government.



**The Graduate School Annual Report 2006-2007.** The information in this report was compiled and edited by Shelia Kendrick.  
Tennessee Technological University: A constituent university of the Tennessee Board of Regents.