

UAA BACHELOR of SCIENCE in ENGINEERING (BSE) PROGRAM

Presentation to the
Society of American Military
Engineers - SAME

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SCHOOL OF ENGINEERING
UNIVERSITY OF ALASKA ANCHORAGE

PRESENTATION OUTLINE

- 1) History of BSE Program
- 2) Soaring Enrollments
- 3) Important Events
- 4) Future Plans
- 5) Critical Needs to Meet Demand
- 6) Plan of Action
- 7) Summary

History of BSE Program

- 1) 1981: B.S. Civil Engineering Program established at UAA**
- 2) 2003-2005: BSE Program developed & established February 17, 2005 – Only two years old!**
- 3) Included input from professional organizations such as ASPE, IEEE, SAME, and industry into program**
- 4) Patterned after award winning program at the Colorado School of Mines**
- 5) UAA BSE program made compatible with UAF programs to enable students to transfer either direction with little or no loss of credit**

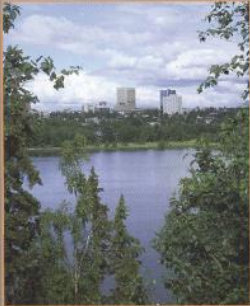
History of BSE Program

BSE Program Specialization Options

- Mechanical Engineering
- Electrical Engineering
- Computer Systems Engineering

NEW!

**BACHELOR OF SCIENCE
IN ENGINEERING (BSE)
DEGREE PROGRAM**



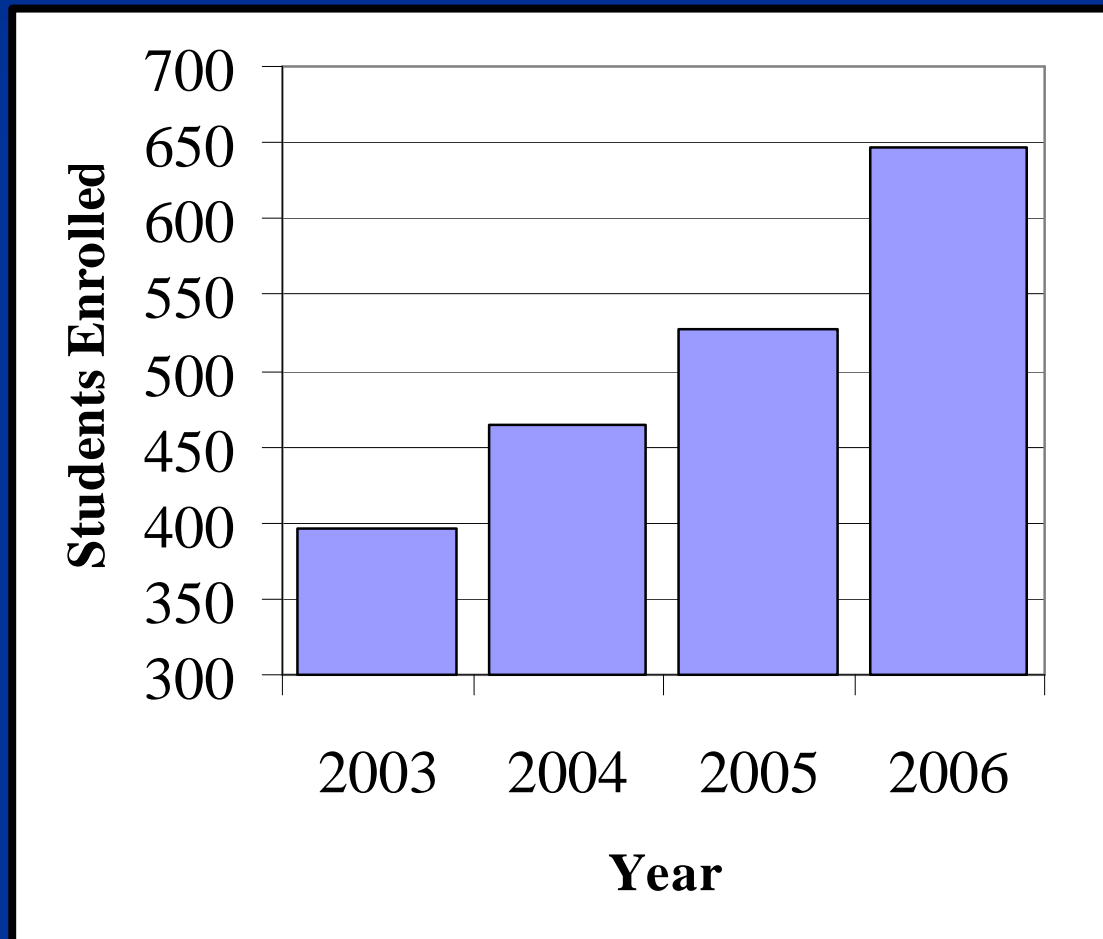
Specialization Areas in:

- Computer Systems Engineering
- Electrical Engineering
- Mechanical Engineering

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Soaring Enrollments

- 250 students enrolled in BSE program in first two years
- Total engineering enrollment increased to over 600 students
- BSE enrollments to double in next two years – *“The BSE Wave”*



Soaring Enrollments

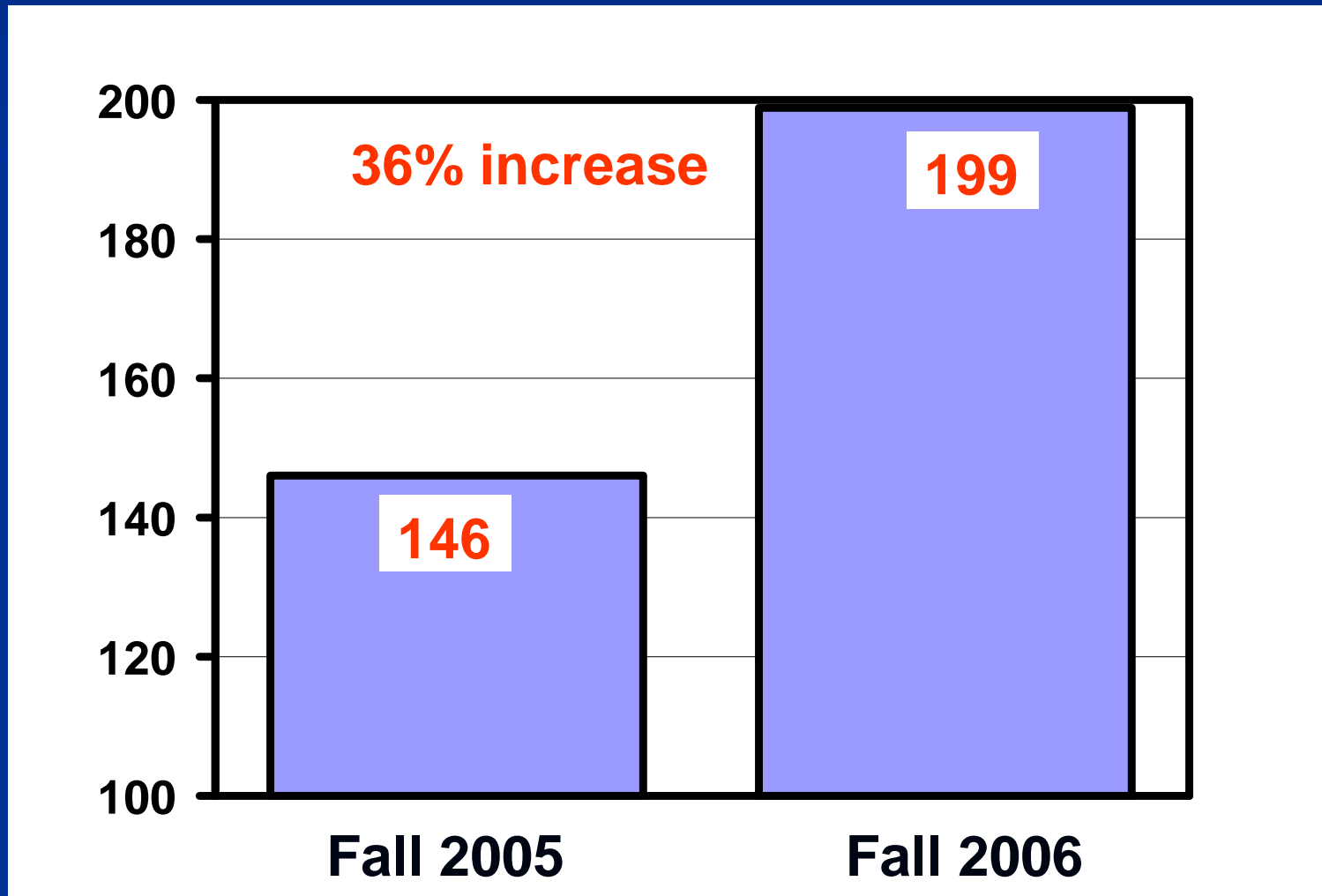
Large Classes: BSE freshman engineering class
with 138 students (Fall 2006)!



Soaring Enrollments

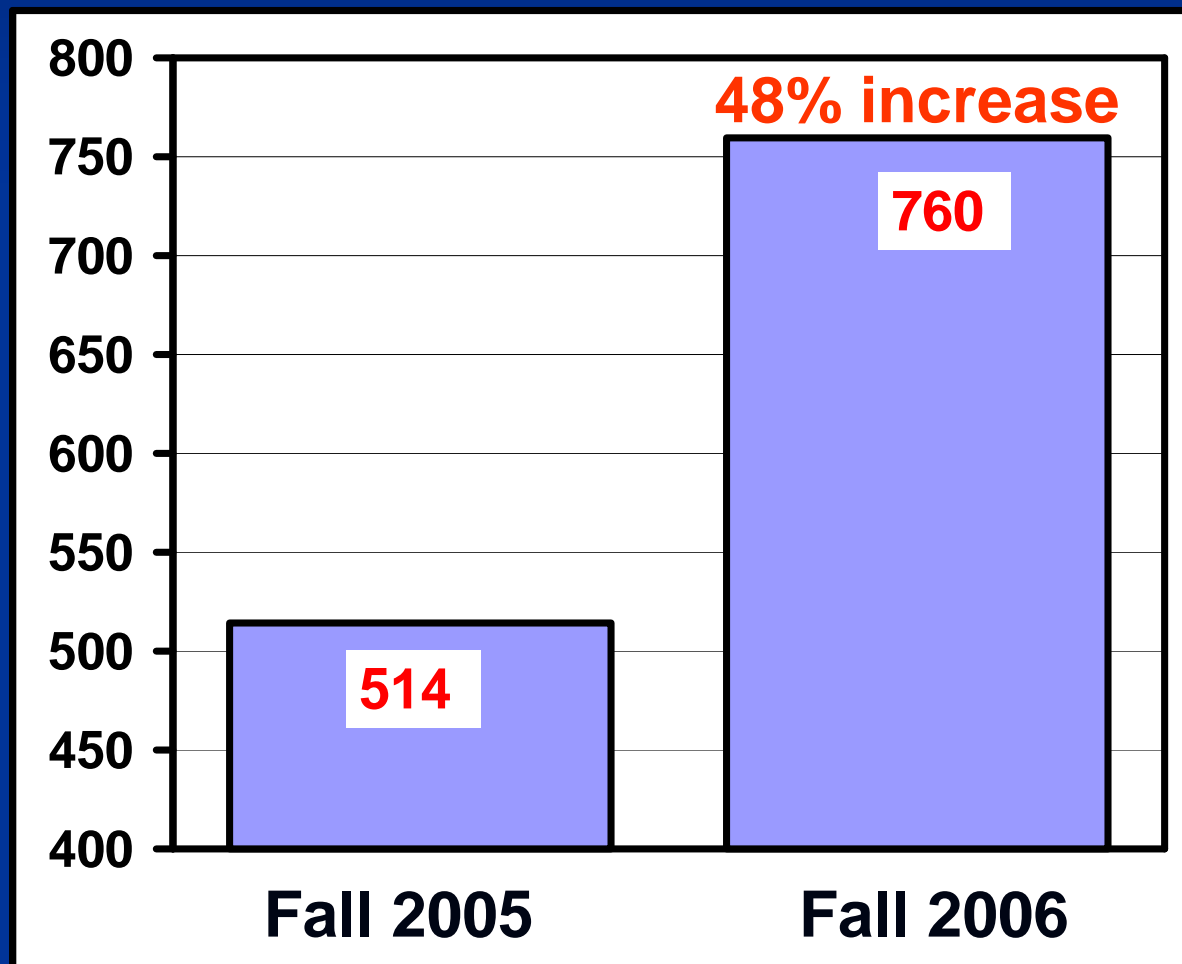
UAA Undergraduate Engineering

199 new students admitted in Fall 2006 – *The BSE Wave*



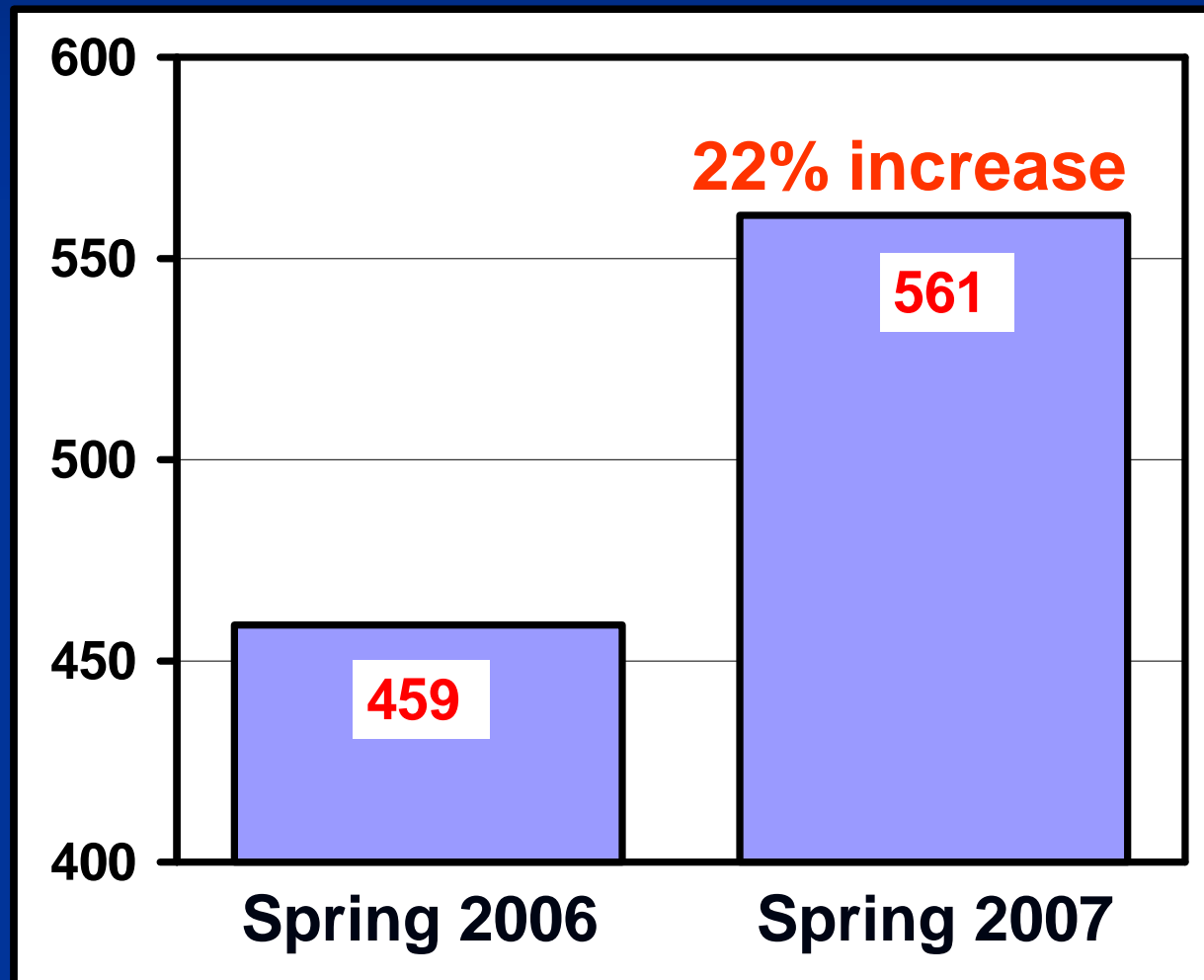
Soaring Enrollments

Lower Division Courses (Freshman/Sophomore)
Student Enrollments – *The BSE Wave*



Soaring Enrollments

Upper Division Courses (Junior/Senior)
Student Enrollments – *The BSE Wave*



Important Events

- **First** BSE Graduate expected in May 2007 !
- ABET **Accreditation** Review in **Fall 2007**
- On target to meet goal of **50** BSE graduates/year by 2010
- Establishing 1+3 and 2+2 **Collaborative** Engineering Programs with UAS, Kenai Peninsula, Mat-Su, and UAF campuses

Future Plans

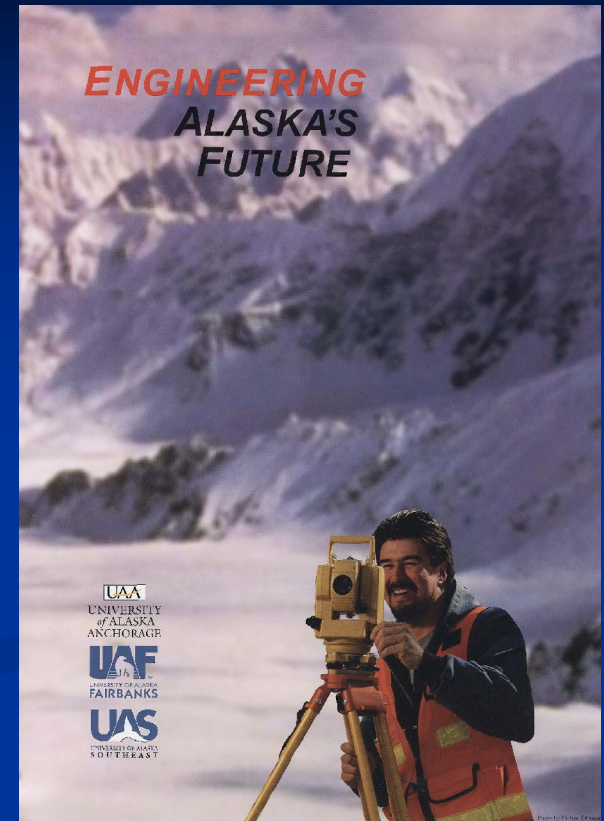
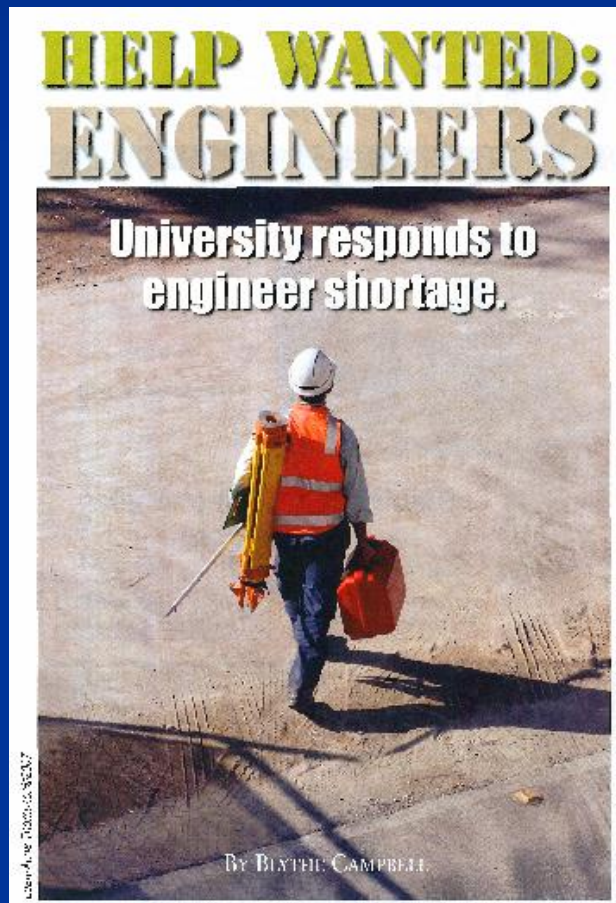
- Seeking separate accreditation for each specialty for easier scholarship awarding and better scholarship opportunities!
- Possible scheduling of engineering courses in evening or weekends to better accommodate working public and high schools students

Critical Needs to Meet Demand

- **Item One:** Critical need for **10** more faculty to handle doubling of students.
- **Item Two:** A new building with about **4** times more space than currently available is needed. Architectural planning for additional space is needed immediately.

Plan of Action

- 1) Contact Governor Sarah Palin and legislators to request support for UAA engineering programs



- 2) Contact UA President Mark Hamilton to express your support for engineering

Plan of Action

Email / Phone Contacts

- **Governor Sarah Palin:**

<http://gov.state.ak.us/govmailSP.php>

- **Legislators (Senators and Representatives):**

<http://w3.legis.state.ak.us/infodocs/800numbers2007.pdf>

or for general legislative information

<http://w3.legis.state.ak.us/home.htm>

- **UA President Mark Hamilton:**

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Summary

- Alaska graduates half national average & is **46th** in the U.S. for graduating engineers per capita
- Alaska needs to graduate about **80** more engineers/year to reach national average
- BSE program is on track to reach goal of **50** graduates/year by 2010
- Action needed with supportive letters & comments to Governor, legislators, & Mark Hamilton