

## DEPARTMENT OF COMPUTER SCIENCE

### Mission

The mission statement of the Computer Science Department is three-pronged:

- To educate students in all program levels in order to provide them with the knowledge, experience, and ethics to become members of the computing profession;
- To pursue research projects in computer science in order to extend the present state of knowledge in the computing field; and
- To serve as an initial and continuing source of education in the field of computer science.

### Vision

Faculty in the Computer Science Department will achieve national and international stature in scholarly and creative activities including research, while the department will be recognized for outstanding teaching.

### Core Values

**Excellence** – We seek excellence in all our endeavors, and we are committed to continuous improvement. We are committed to outstanding research, scholarly, and creative activity, and effective high-quality teaching.

**Intellectual Freedom** – We believe in ethical and scholarly questioning in an environment that respects the rights of all to freely pursue knowledge. We are committed to academic freedom.

**Service** – We believe that serving others is a noble and worthy endeavor.

**Integrity** – We are committed to the principles of truth and honesty, and we will be equitable, ethical, and professional.

**Diversity** – We respect others and value diversity of opinions, freedom of expression, and other ethnic and cultural backgrounds.

**Stewardship of Resources** – We are dedicated to the efficient and effective use of resources. We accept the responsibility of the public's trust and are accountable for our actions.

## Goals, Critical Success Factors, Objectives, and Strategies

**Goal 1: The department strives for academic excellence in undergraduate teaching.**

### **Critical Success Factors:**

- Offer excellent programs that attract [as measured by comparison with other institutions listed in the Taulbee survey of the CRA (Computing Research Association)] and motivate students [as measured by graduation rate] to prepare them for careers related to computer science.
- Offer an excellent, well-rounded education to undergraduates requiring general and liberal education as well as the technical skills to compete in the job market by following ACM (Association for Computing Machinery) recommendations and utilizing the departmental BEST (Business Educational Support Team) team.
- Obtain high quality instructional laboratories of adequate size.
- Offer general education courses such as CS 1003 and CS 1103.

### ***Objectives:***

**Objective 1.1:** The department will seek to fund a raise program for equity in faculty pay.

**Objective 1.2:** The department will seek to fund a merit based raise program for faculty.

**Objective 1.3:** The department will seek to fund new faculty positions to have professorial faculty rather than teaching assistants in all lecture sections of classes.

**Objective 1.4:** The department will seek to fund new faculty positions so there is at least one full time faculty member for each core area (architecture, data structures, database, graphics, methodology, programming languages, and theory) of computer science.

**Objective 1.5:** The department will seek to fund new faculty positions to enhance the department's current thrust areas (applied computing, artificial intelligence, computer networking).

**Objective 1.6:** The department will seek to have an effective program for mentoring junior faculty.

**Objective 1.7:** The department will seek to create endowed chairs including at least one based at OSU-Tulsa.

**Objective 1.8:** The department will seek to formalize a program for recognition of outstanding teaching in the department.

**Objective 1.9:** The department will seek to retain professors who have outstanding teaching skills.

**Objective 1.10:** The department will seek to allow for some faculty members from whom excellent teaching is expected without a corresponding level of research excellence.

Strategies:

- Request the dean's office provide funding for salary equity such that there neither is salary inversion nor severe salary compression among department members.
- Request the Arts and Sciences dean's office fund a merit raise program as soon as such funds are available.
- Request staffing to hire two faculty members to teach classes presently taught by graduate students.
- Request staffing to hire one faculty member whose thrust area is database and one whose thrust area is programming languages to complete coverage of the core areas of computer science.
- Request additional staffing to hire faculty in departmental strength areas of computer networking (including grid computing), artificial intelligence, and applied computing.
- Assign a senior faculty member as a mentor for each new inexperienced junior faculty member.
- Communicate the department's desire to have endowed chairs to the OSU Foundation through the Arts and Sciences development officer and the Chief Academic Officer at OSU-Tulsa.
- Request the departmental undergraduate committee develop criteria and a plan for an outstanding teaching award.
- Give merit raises for quality teaching commensurate with those given for research.
- Request staffing to hire faculty whose teaching responsibility is the lower division classes.

**Goal 2: The department strives for academic excellence in graduate instruction.**

**Critical Success Factors:**

- Offer excellent programs that attract and motivate students to prepare them for academic and/or research careers related to computer science.
- Provide excellent graduate programs that prepare the students for careers in industry or education.
- Obtain high quality instructional and research laboratories of adequate size.

**Objectives:**

**Objective 2.1:** The department will seek to fund a raise program for equity in faculty pay.

**Objective 2.2:** The department will seek to fund a merit based raise program for faculty.

**Objective 2.3:** The department will seek to fund new faculty positions so there is at least one full time faculty member for each core area (architecture, data structures, database, high-performance computing, languages, methodology, programming, theory) of computer science.

**Objective 2.4:** The department will seek to fund new faculty positions to enhance the department's current thrust areas (applied computing, artificial intelligence computer networking).

**Objective 2.5:** The department will seek to have an effective program for mentoring junior faculty.

**Objective 2.6:** The department will seek to create endowed chairs including at least one based at OSU-Tulsa.

**Objective 2.7:** The department will seek to formalize a program for recognition of outstanding teaching in the department.

**Objective 2.8:** The department will seek to retain professors who have outstanding teaching skills.

**Strategies:**

- Request the dean's office provide funding for salary equity such that there neither is salary inversion nor severe salary compression among department members.
- Request the Arts and Sciences dean's office fund a merit raise program as soon as such funds are available.
- Request staffing to hire two faculty members to teach classes presently taught by graduate students.

- Request staffing to hire one faculty member whose thrust area is database and one whose thrust area is programming languages to complete coverage of the core areas of computer science.
- Request additional staffing to hire faculty in departmental strength areas of computer networking (including grid computing), artificial intelligence, and applied computing.
- Assign a senior faculty member as a mentor for each new inexperienced junior faculty member.
- Communicate the department's desire to have endowed chairs to the OSU Foundation through the Arts and Sciences development officer and the Chief Academic Officer at OSU-Tulsa.
- Request the departmental graduate committee develop criteria and a plan for an outstanding research award.

**Goal 3: The department strives for academic excellence in research and creative activities.**

**Critical Success Factors:**

- Have a faculty known for its research contributions, especially in the areas of applied computer science, artificial intelligence, and networking.
- Have a program of endowed chairs to attract research leaders.
- Retain professors with outstanding research skills.
- Increase external funding annually.
- Increased the number of sabbaticals.

**Objectives:**

**Objective 3.1:** The department will seek to fund a raise program for equity in faculty pay.

**Objective 3.2:** The department will seek to fund a merit based raise program for faculty.

**Objective 3.3:** The department will seek to fund new faculty positions to enhance the department's current thrust areas (applied computing, artificial intelligence, computer networking).

**Objective 3.4:** The department will seek to have an effective program for mentoring junior faculty.

**Objective 3.5:** The department will seek to create endowed chairs including at least one based at OSU-Tulsa.

**Objective 3.6:** The department will seek to formalize a program for recognition of outstanding research in the department.

**Objective 3.7:** The department will seek to retain faculty who have outstanding research skills.

**Objective 3.8:** The department will seek to provide enhanced opportunities for research for both junior and senior faculty members.

**Objective 3.9:** The department will seek to provide excellent laboratory facilities in which researchers can conduct research.

**Objective 3.10:** The department will seek to provide adequate and competitive start-up funds for new faculty.

**Strategies:**

- Request the dean's office provide funding for salary equity such that there neither is salary inversion nor severe salary compression among department members.

- Request the Arts and Sciences dean's office fund a merit raise program as soon as such funds are available.
- Request staffing to hire two faculty members to teach classes presently taught by graduate students.
- Request staffing to hire one faculty member whose thrust area is database and one whose thrust area is programming languages to complete coverage of the core areas of computer science.
- Request additional staffing to hire faculty in departmental strength areas of computer networking (including grid computing), artificial intelligence, and applied computing.
- The departmental graduate committee will create criteria and a procedure for annually selecting the outstanding faculty researcher.
- Grant a reduction in teaching load and a merit pay increase each year for faculty actively pursuing a research agenda.
- Find additional funding for faculty travel for research purposes. (Agency visits, conference travel, etc.)\
- Request additional laboratory space, furnishings and equipment on both OSU campuses (OSU-Stillwater and OSU-Tulsa).
- Increase the start-up funds for new faculty hires to approximately \$75,000.00 total.

**Goal 4: The department seeks academic excellence in outreach/service.**

**Critical Success Factors:**

- Provide excellent outreach programs through Arts and Sciences Extension, ETS, ICS, and the Web.
- Recognize outstanding faculty who utilize nontraditional presentations via outreach as well as those who are outstanding in the areas of teaching and research.
- Institute merit pay increases that reflect excellence in outreach as well as teaching and research.
- Allow excellence in outreach to replace excellence in research for faculty who are involved substantially in outreach when faculty are evaluated for promotion and/or tenure.

**Objectives:**

**Objective 4.1:** The department will seek to fund a raise program for equity in faculty pay.

**Objective 4.2:** The department will seek to fund a merit based raise program for faculty.

**Objective 4.3:** The department will seek to have an effective program for mentoring junior faculty.

**Objective 4.4:** The department will seek to formalize a program for recognition of outstanding outreach in the department.

**Objective 4.5:** The department will seek to retain faculty who have outstanding skills for outreach.

**Strategies:**

- Request the dean's office provide funding for salary equity such that there neither is salary inversion nor severe salary compression among department members.
- Request the Arts and Sciences dean's office fund a merit raise program as soon as such funds are available.
- Request staffing to hire two faculty members to teach classes presently taught by graduate students.
- Have the distance learning coordinator and the department head develop criteria and a procedure for annually recognizing the faculty member with the most meritorious outreach service.

**Goal 5: Synergy in the use of resources benefits the department.**

**Critical Success Factors:**

- Increase the existing level of synergy with other OSU units; especially, ITD, ECEN, and MIS/AIS.
- Have CS faculty from OSU-Tulsa and OSU-Stillwater collaborate on research and outreach projects.
- Make use of compressed video and the Web to enhance the value of faculty members.
- Continue participation in telecommunications programs.

**Objectives:**

**Objective 5.1:** The department will consider funding joint faculty appointments with ITD.

**Objective 5.2:** The department will cross-list appropriate courses with ECEN, INDEN, and MIS/AIS.

**Objective 5.3:** The department will encourage faculty from ECEN, MIS/AIS, and INDEN to serve on CS graduate students' committees.

**Objective 5.4:** The department will request funding for new faculty positions in the areas of architecture, database, networking and high performance computing, and numerical optimization.

**Strategies:**

- The department head will visit with the OSU system CIO to explore the feasibility of joint appointments with ITD.
- Make changes in the OSU catalog to reflect cross-listed classes as approved by both departments involved.
- Advise graduate students of the possibility of having faculty from ECEN, INDEN, and MIS/AIS serve on the advisory committees for their degree.
- Request staffing in areas of computer science that can support other departments such as ECEN, INDEN, and MIS/AIS.

**Goal 6: The department will strive to enhance the department's image.**

**Critical Success Factors:**

- Increase national, international, and state exposure of departmental achievements.
- Increase the university's awareness of departmental achievements.
- Increase the media coverage of achievements by students and faculty.

**Objectives:**

**Objective 6.1:** The department will develop a marketing plan.

**Objective 6.2:** The department will continuously monitor and improve the departmental website as necessary.

**Objective 6.3:** The department will continue to have advisors and faculty members identify possible candidates for prestigious awards such as NSF Fellowships, Ford Fellowships, etc.

**Objective 6.4:** Individual faculty achievements should be communicated to other departmental faculty, including the department head.

**Objective 6.5:** Individual and group faculty achievements should be communicated to other faculty, students, and alumni.

**Objective 6.6:** Individual and group student achievements should be communicated to other students, faculty, and alumni.

**Objective 6.7:** The department will increase faculty and student participation in regional, national, and international workshops, symposia, and conferences.

**Strategies:**

- The department will seek advice from PIO and marketing departments to develop a marketing plan.
- One or more departmental employees will be assigned to review the departmental website and serve as webmaster or web mistress.
- Faculty will suggest that students work with the university scholarship office to apply for scholarships and fellowships for which they are eligible.
- Individual faculty will provide a report of their achievements annually or more frequently.
- Departmental faculty will provide a report of their achievements annually or more frequently.
- Departmental faculty will work with the college PIO to publicize both individual and group work.

- The department will request an increase in its maintenance and operations budget to allow additional faculty and student travel to workshops, symposia, and conferences.

**Goal 7: The department will seek partnerships and collaborations.**

**Critical Success Factors:**

- Partner with selected businesses and industries to provide internships and cooperative experiences for computer science students.
- Partner with ITD to share faculty and student employees.
- Have industrial partners endow one or more chairs for the department.

**Objectives:**

**Objective 7.1:** The department will meet with and encourage potential employers to hire OSU computer science students either as interns or as a part of the students' cooperative education programs.

**Objective 7.2:** The department will seek a partnership with ITD to share Ph.D. level faculty and staff.

**Objective 7.3:** The department will work with the Arts and Sciences college development officer to obtain funding for one or more endowed chairs for the department.

**Objective 7.4:** The department will work with the Arts and Sciences college development officer to obtain funding for faculty development.

**Strategies:**

- The department head and advisors will meet with campus recruiters and/or computing department heads from industry to explore the possibility of their sponsoring student internships as well as hiring graduates from the department.
- The department head will seek to meet with the system CIO to explore sharing faculty and staff.
- One or more departmental faculty will meet with the development officer and/or potential donors to obtain endowments to support chairs in the department.
- Contact the college development officer to identify donors to support a faculty development fund.

**Goal 8: Undergraduate student development is a departmental goal.**

**Critical Success Factors:**

- Increase the quality of undergraduate students as measured by GPA and ACT scores, etc.
- Provide programs for undergraduate research.
- Endow undergraduate scholarships.
- Limit the number of majors to what the faculty can teach/advise/mentor effectively by having class sizes meet the ABET/CSAB requirements.

**Objectives:**

**Objective 8.1:** Some members of the department will visit high school students in their schools, have them visit the department, or both.

**Objective 8.2:** The department will encourage high school students to take a rigorous college preparatory program, including four years of mathematics.

**Objective 8.3:** The department will seek majors whose ACT scores are 24 or higher.

**Objective 8.4:** Some members of the department will evaluate the undergraduate program relative to the ACM/IEEE-CS Curriculum 2001.

**Objective 8.5:** Some members of the department will look at the undergraduate program relative to CSAB/ABET accreditation standards to determine whether such accreditation for the department is desirable.

**Objective 8.6:** Some members of the department will provide programs such as REU for undergraduate research.

**Objective 8.7:** The department will strive to endow scholarships and fellowships to attract outstanding students.

**Objective 8.8:** The department will fund enough faculty positions to meet the CSAB/ABET requirement of having no section of any class except CS I (CS 1113) have more than 30 students.

**Objective 8.9:** The department will fund a staff position for a “programming team” coach.

**Strategies:**

- Departmental advisors and/or the department head will contact high school advisors in Oklahoma and South Central Kansas to present our B.S. degree program.
- The department will invite students from selected high schools to make on-campus visits to the department.
- The department will communicate the need for students to complete a rigorous college preparatory program in mathematics and science in high school.

- The department will invite students whose ACT scores are 24 or higher and who have been identified either by the admissions office or the High School and College Relations Office to major in Computer Science.
- The departmental undergraduate committee will read the ACM/IEEE-CS curriculum 2001 and suggest appropriate changes in the undergraduate curriculum to the entire faculty for implementation.
- The departmental undergraduate committee will review the CSAB/ABET accreditation requirements; determine whether such accreditation is desirable; and suggest changes in the undergraduate program as necessary.
- The department will participate in programs that provide individual and/or group research experiences.
- The department will contact the college development officer to explore finding donors to endow undergraduate scholarships.
- Request staffing to hire enough faculty (approximately 5) to meet the CSAB/ABET criteria of having a maximum section size of 30 for any computer science class.
- Request staffing to hire a programming team coach.

**Goal 9: Graduate student development is a continuing process in the department.**

**Critical Success Factors:**

- Increase the quality of graduate students.
- Increase graduate student stipends to at least the regional average.
- Increase the number of graduate assistantships.
- Create endowed graduate fellowships.
- Recruit and retain outstanding graduate students.

**Objectives:**

**Objective 9.1:** The department would like to increase the current level of national recognition for the M.S. and Ph.D. programs.

**Objective 9.2:** The department would like to recruit outstanding B.S. graduates from colleges and universities in the region for the M.S. and Ph.D. programs.

**Objective 9.3:** The department would like to have graduate students work closely with a faculty on research projects to develop co-authored research publications.

**Objective 9.4:** The department would like to increase the number and amount of research assistantships.

**Objective 9.5:** The department would like to increase the number and amount of graduate teaching assistantships.

**Objective 9.6:** The department would like to seek graduate students whose quantitative GRE score is at least at the 75<sup>th</sup> percentile.

**Objective 9.7:** The department would like to limit the number of students in the graduate programs to no more than 4 Ph.D. students and 8 M.S. students per faculty member.

**Objective 9.8:** The department would like to endow scholarships and fellowships to attract outstanding graduate students.

**Objective 9.9:** The department would like to have Ph.D. students prepare research funding proposals with their faculty supervisors.

**Strategies:**

- Contact the college PI officer to publicize the OSU graduate degree programs.
- Visit colleges and universities in Oklahoma and surrounding states to recruit new graduate students.
- Try to recruit outstanding OSU seniors into departmental graduate programs.

- Identify faculty members whose research projects match the interest of graduate students and potential graduate students.
- Request the university fund graduate assistantships at a level competitive with other Ph.D. granting departments in Oklahoma and surrounding states.
- Request funding for up to 12 graduate assistantships per graduate faculty member in order to provide support or partial support for all graduate students.
- Contact the college development officer to seek funding for endowed scholarships/fellowships.
- Request Ph.D. advisors submit proposals to funding agencies to support Ph.D. dissertation research.

**Goal 10: The department will enhance diversity.**

**Critical Success Factors:**

- Increase the number of minority tenure-track faculty members.
- Increase the number of female tenure-track faculty members.
- Have special mentoring programs for minority and female faculty members.
- Recruit minority and female students into departmental degree programs (B.S., M.S., Ph.D.).

**Objectives:**

**Objective 10.1:** The department would like to seek funding to allow extra tenure-track hires when qualified minority or female faculty candidates are available.

**Objective 10.2:** The department would like to recognize and publicize the accomplishments of minority and female faculty members.

**Objective 10.3:** The department would like to create a special mentoring program for minority and female faculty.

**Objective 10.4:** The department would like to have a program to recruit minority and female students into departmental degree programs.

**Strategies:**

- Request funding to make competitive offers to well-qualified minority and female candidates when they apply for tenure track faculty positions.
- Work with PIO to publicize the accomplishments of minority and/or female faculty members.
- Work with the [associate] vice president for minority affairs to develop a mentoring program for minority faculty.
- Formalize the present program for recruiting minority students into graduate degree programs.
- Create a new program to recruit minorities and females into the B.S. degree program.

**Goal 11: Human resources (Faculty) are a departmental priority.**

**Critical Success Factors:**

- Retain outstanding faculty members.
- Have competitive salaries in relation to institutions listed in the Taulbee survey of the CRA.
- Eliminate salary inversion.
- Eliminate salary compression.
- Allow mid-year raises for outstanding faculty members.
- Raise funds to endow faculty chairs by 2009.
- Provide adequate funding for faculty travel and development.
- Provide raises to have salary equity with institutions listed in the Taulbee survey of the CRA.
- Provide merit raises at least annually.
- Assign faculty mentors to all junior faculty.
- Provide enhanced opportunities (release time comparable to the release time presently given to new faculty hires) for research for both junior and senior faculty.
- Implement recognition programs for outstanding faculty.
- Increase the number of tenure track faculty.
- Provide sufficient and competitive start-up funding for new faculty.
- Support faculty's professional development activities.
- Provide appropriate office and laboratory space for all faculty members.

**Objectives:**

**Objective 11.1:** The department would like to have a program to eliminate and avoid salary inversion.

**Objective 11.2:** The department would like to have a program to eliminate and avoid salary compression.

**Objective 11.3:** The department would like to have programs for annual or semi-annual merit raises.

**Objective 11.4:** The department would like to seek endowments for faculty chairs.

**Objective 11.5:** The department would like to pay competitive salaries relative to departments listed in the Taulbee survey of the CRA.

**Objective 11.6:** The department would like to increase the number of tenure track faculty to at least the number required to meet the CSAB/ABET accreditation.

**Objective 11.7:** The department would like to provide an effective mentoring program for junior faculty.

**Objective 11.8:** The department would like to give faculty release time to work on research projects.

**Objective 11.9:** The department would like to formalize recognitions for outstanding teaching, research, and outreach at the departmental level.

**Objective 11.10:** The department would like to increase funding for faculty travel and development.

**Objective 11.11:** The department would like to obtain new space for faculty research laboratories.

Strategies:

- Evaluate the present faculty salary structure to identify instances of salary inversion and salary compression.
- Request the Arts and Sciences College provide funding both to eliminate salary inversion and to minimize the number of instances of salary compression.
- Request funding for annual or semi-annual merit raise programs.
- Request funding to make the pay scale for associate and full professors competitive with other departments listed in the Taulbee survey.
- Request staffing to have enough faculty so no section of any class has more than 30 students. (CSAB/ABET accreditation requirement)
- Assign a senior faculty member as a mentor to each new, inexperienced assistant professor.
- Work with the college development officer to seek funding for endowed chairs in the department.
- Release faculty who have active research projects from part of their teaching duties.
- Have appropriate departmental committees develop recognition programs for outstanding teaching, research, and outreach activity.
- Request an increase in the departmental maintenance and operations budget to allow increased faculty travel and development.
- Request additional laboratory space at both OSU-Stillwater and OSU-Tulsa.

**Goal 12: Human resources (Staff) are a departmental priority.**

**Critical Success Factors:**

- Pay staff members a salary/wage that reflects the industry average.
- Retain outstanding staff members.
- Have a merit raise program for staff.
- Increase laboratory staff to a level to maintain all departmental laboratories and office equipment and software.
- Make the staff salaries and job titles reflect the duties performed.
- Pay staff salaries competitively with salaries of comparable positions in the region.
- Support travel and development for computer support staff.

**Objectives:**

**Objective 12.1:** The department would like to fund merit raises for staff.

**Objective 12.2:** The department would like to develop a mentoring program for new staff members.

**Objective 12.3:** The department would like to create a recognition program for staff members.

**Objective 12.4:** The department would like to fund raises to make staff salaries/wages competitive.

**Objective 12.5:** The department would like to increase the laboratory staff to a level that removes the backlog of staff projects.

**Objective 12.6:** The department would like to fund staff travel and development.

**Strategies:**

- Request funding for annual or semi-annual merit raise program for staff.
- Work with the Arts and Sciences College, ITD, and/or university human resources to develop a mentoring program for new staff employees.
- Request the present departmental staff develop a recognition program for outstanding work.
- Request new staffing for computing facilities to allow systems managers to reduce the present backlog of systems projects.
- Request an increase in the departmental maintenance and operations budget to allow staff travel and development.

**Goal 13: Human resources (Student employees) can help the department.**

**Critical Success Factors:**

- Recruit graduate assistants who can speak English well.
- Pay GA stipends at the average for departments listed in the Taulbee survey of the CRA or higher.
- Have a raise program to maintain the relative stipend level among Ph.D. granting departments listed in the Taulbee survey of the CRA.
- Have an indoctrination program for new graduate assistants.
- Minimize the number of course sections for which a TA is responsible.
- Create additional TA/RA slots to allow the recruiting of more domestic students.
- Increase departmental participation in the work-study program to have student employees help with systems and network programming and management.
- Strive to obtain adequate office/work space for student employees.

**Objectives:**

**Objective 13.1:** The department would like to recruit new graduate assistants from domestic universities; especially, those in the state and the region.

**Objective 13.2:** The department would like to increase graduate student stipends to at least the Big 12 or regional average for Ph.D. granting departments.

**Objective 13.3:** The department would like to increase graduate student stipends annually to maintain the level met by objective 7c.2.

**Objective 13.4:** The graduate program director will meet formally with teaching assistants to explain their duties and the department's expectations.

**Objective 13.5:** Research supervisors will meet regularly with research assistants.

**Objective 13.6:** The department would like to fund new faculty positions so that it is unnecessary to have teaching assistants responsible for CS 2133 and CS 2432.

**Objective 13.7:** Fund new teaching assistantship slots to help recruit domestic students.

**Objective 13.8:** Hire work-study students as systems programmers as well as office aides.

**Strategies:**

- Contact and visit institutions with undergraduate degree programs throughout the state to try to recruit their graduates into OSU Computer Science graduate programs.
- Determine the Big 12 and regional averages of graduate student stipends, and increase OSU's stipends to above the higher of those two averages.
- Annually review the graduate student stipends and adjust them to remain competitive.

- The graduate program director will schedule formal meetings and conferences to explain TA/RA duties and to review individual performances.
- Every graduate faculty member who is a research supervisor will have formal meetings with his/her RA's to establish goals and to review performance.
- Request faculty staffing to allow the department to eliminate TAs having primary responsibility for teaching classes such as CS 2133 and CS 2432.
- Request funding for additional TAs to help recruit domestic students.
- Continue the program to hire undergraduate students as "assistant" systems managers and office help.

**Goal 14: A significant part of the department's responsibility is at OSU-Tulsa.**

**Critical Success Factors:**

- Increase total Student Credit Hours at OSU-Tulsa.
- Increase graduate student headcount at OSU-Tulsa.
- Maintain undergraduate student headcount at OSU-Tulsa.
- Implement the department's 5-year plan (attached) for OSU-Tulsa.

**Objectives:**

**Objective 14.1:** The department would like to increase the course offerings at OSU-Tulsa.

**Objective 14.2:** The department would like to maintain a working relationship with Tulsa Community College.

**Objective 14.3:** The department would like to obtain adequate laboratory facilities for research and instruction at OSU-Tulsa.

**Objective 14.4:** The department would like to obtain the necessary resources to implement the department's 5 year plan (attached) for OSU-Tulsa.

**Strategies:**

- As the number of faculty based at OSU-Tulsa increases, add more course sections to the Tulsa schedule.
- Visit selected faculty and students from Tulsa Community College to encourage them to transfer to OSU after they complete their associate's degree.
- Have the OSU Computer Science advisors meet with their counterparts at Tulsa Community College to make sure Tulsa Community College students are advised to take courses leading to transfer to OSU.
- Request additional laboratory space from the OSU-Tulsa administration.

**Goal 15: Quality of Life (Economic development) is important to the department.**

**Critical Success Factors:**

- Graduates will be able to contribute to the economic development of Oklahoma with a corresponding enhancement of the quality of life.
- The department will offer excellent programs that attract and motivate students and prepare them for careers related to computer science.
- The department will offer an excellent, well-rounded education to undergraduates requiring general and liberal education to non majors as well as technical skills to its majors to compete in the job market.

**Objectives:**

**Objective 15.1:** A substantial portion of OSU Computer Science graduates should seek employment with companies doing business in Oklahoma.

**Objective 15.2:** Graduates should be able to participate in community activities wherever they reside.

**Strategies:**

- Departmental advisors and faculty will encourage graduating students to explore employment with companies that have a major presence in Oklahoma.
- Departmental advisors and faculty will encourage students to become involved in community activities after graduation.

**Goal 16: Healthy living is important for all OSU employees and students.**

**Critical Success Factors:**

- The department will encourage students and faculty to live a healthy life style without imposing biases of its leadership.

***Objectives:***

**Objective 16.1:** Faculty, staff, and students will be encouraged to use the services of the Wellness Center, PE center, EAP, and the Health Center as appropriate.

**Strategies:**

- Students, staff and faculty will be advised of the availability of services (Wellness center, PE Center, Health Center, EAP) to support healthy living.
- Faculty and staff will be referred to the EAP when the department head deems it appropriate.

**Goal 17: The department would like to leverage departmental resources as much as possible.**

**Critical Success Factors:**

- Provide adequate start-up funds for new faculty hires.
- Work with related departments to share resources without giving up control of departmental laboratories, research equipment, curricula, etc.
- Use sabbatical leaves to enhance faculty's abilities to seek external funding.
- Classrooms should be equipped for multimedia presentations.
- Support interdisciplinary majors such as AGECS/CS.
- Exploit the common research interests of departmental faculty.

**Objectives:**

**Objective 17.1:** The department wants to provide start-up funding for all new faculty at a level competitive with other national research institutions.

**Objective 17.2:** The department wants to explore possible resource sharing with ITD, ECEN, and MIS/AIS.

**Objective 17.3:** The department wants to encourage faculty to take sabbatical leaves when eligible.

**Objective 17.4:** The department wants to encourage faculty to find funding sources beyond NSF as well as continuing to seek NSF funding.

**Objective 17.5:** The department wants to request the university equip all classrooms in the MSCS building, as well as other classrooms campus-wide, to provide multimedia facilities.

**Objective 17.6:** The department wants to hire additional faculty in departmental strength areas.

**Strategies:**

- Provide research start-up funding for new faculty of at least \$75,000.00.
- Contact ITD to explore sharing faculty/staff with ITD.
- Contact ECEN and ITD about sharing high performance computing resources.
- Contact MIS/AIS about sharing faculty on selected graduate student committees.
- Remind faculty when they are eligible for sabbatical leaves and encourage them to take those leaves.
- Request faculty submit research proposals to funding agencies in addition to NSF.
- Request the administration provide multimedia classrooms wherever computer science classes are taught.
- Request new faculty staffing in the areas of artificial intelligence, networking and high performance computing, and scientific applications.