Membership and charge

The IT Career Ladder Sub-committee is made up of Becky Carr, chair, Lauri Brender, David Sweeney, Andy Bland, and Patti Tidwell from TAMU Human Resources. The sub-committee was charged with reviewing the current CIS career ladder for applicability to technology groups across campus. Specifically they were to determine which career ladders were appropriate to use outside of CIS and whether additional career ladder(s) were necessary to meet the needs of technology groups external to CIS.

Summary of sub-committee activities and information gathered

The sub-committee was informed about the CIS philosophy regarding the career ladder, the purpose behind it and how they used it. Gib Sawtelle was helpful in explaining the IT families (see attached), descriptions and their meanings and how the ladders should be used inside and outside CIS. A summary of the levels of the career ladder, equating the level of work required and the experience and education required is shown below.

<table>
<thead>
<tr>
<th>Title</th>
<th>Level of work required</th>
<th>Required Experience</th>
<th>Required Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief</td>
<td>Research and design at the enterprise level</td>
<td>12 years</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Senior Lead</td>
<td>Enterprise level deployment</td>
<td>8 years</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Lead</td>
<td>Technical oversight of projects</td>
<td>5 years</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Senior</td>
<td>Complex, troubleshooting, problem solving</td>
<td>3 years</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Base</td>
<td>Routine job functions</td>
<td>2 years</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Senior IT Associate</td>
<td>Assistant to upper personnel</td>
<td>1 year</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>IT Associate</td>
<td>Learner</td>
<td>None</td>
<td>Bachelor’s Degree</td>
</tr>
</tbody>
</table>

- Network Analyst, Network Engineer, Security Analyst, IT Policy and Security Programs Administrator career ladders are designed for use within CIS only.

- IT ladders that are designed such that they could be used within CIS or outside CIS are IT Consultant, IT Management, Microcomputer/LAN Administration, Software Applications Development, Systems Administrator, Database Administration and the IT Associate.

Many departments have found it difficult to utilize the specialized career ladders in situations where a highly qualified technology professional must function in more than one specialty areas area. After checking resources in the field and looking at position descriptions of current IT professionals the sub-committee agreed that a new ladder classification needed to be developed that would allow for multiple areas of expertise in one position.

Once the sub-committee determined that there was a need for an additional career ladder, we studied the details of current position descriptions and developed position descriptions for a five level career ladder to be used by anyone across campus. There are some similarities to current IT career ladders, but in some areas other campus career ladder frameworks were used. Once the positions descriptions were vetted among the sub-committee and with a representative from Human Resources, Patti Tidwell from Classification and Compensation, completed the beginning salary analysis based upon industry standards.
The sub-committee also found some out-dated terminology and information in the current CIS career ladder descriptions and is proposing the identified problems be shared with CIS.

**Deliverables**

Deliverables proposed were a new career ladder(s) if necessary and suggestions for updating existing career ladder to CIS.

**Newly proposed career ladder**

*Newly proposed Information Technology Professional positions - Designed to meet the IT needs of a unit where multifaceted expertise is required. These positions includes general responsibilities plus responsibilities in at least two areas of specialization including systems, service, applications, and/or database management*

<table>
<thead>
<tr>
<th>Title</th>
<th>Starting Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Information Technology Professional III</td>
<td>$67,550 - $81,055</td>
</tr>
<tr>
<td>Senior Information Technology Professional II</td>
<td>$59,550 - $67,550</td>
</tr>
<tr>
<td>Senior Information Technology Professional I</td>
<td>$52,050 - $59,550</td>
</tr>
<tr>
<td>Information Technology Professional II</td>
<td>$46,050 - $52,050</td>
</tr>
<tr>
<td>Information Technology Professional I</td>
<td>$42,050 - $46,050</td>
</tr>
</tbody>
</table>

*Position descriptions are attached*

**Sub-committee recommendations**

1. The subcommittee recommends the Information Technology Professional career ladder to the ITAC for review and approval, and if approved to be forwarded to Dr. Pierce Cantrell and Human Resources for approval.

2. The sub-committee recommends that technology groups not currently using career ladders for IT positions, review the career ladders to determine how they might be utilized. The sub-committee encourages the use of career ladders as appropriate because of the benefits of career advancement for their employees and the periodic review of the position descriptions and salaries - to ensure that positions are competitive with the industry.

3. The sub-committee recommends that the new career ladder classification be reviewed for technical currency and accuracy routinely (minimally every 5 years) and that the ITAC be responsible for this review as well as reviewing the other IT career ladders used outside CIS.
4. The subcommittee recommends the following suggestions be forwarded to CIS for review and updating current position descriptions:
   - Remove references to Microcomputer/LAN Administrator and use computer or computing
   - Add information about web developers to the IT consultant ladder (this is being done in practice but has not been officially changed on the description)
   - Consider additional career ladder(s) in the future as needs arise such as the growth of project management.
SUMMARY

General Description: The Senior Information Technology Professional III position is designed to meet the IT needs of a unit where multifaceted expertise is required. This position includes the general responsibilities listed below plus two or more of the specialty areas of systems, service, applications, and/or database management and may include any appropriate duties listed in the Senior Information Technology Professional II position description. Routinely serves as the unit’s primary top-level technical expert consultant in multiple specialized fields of technology. Routinely researches and develops the unit’s IT strategy and budget. Participates in the unit’s strategic planning process. Routinely provides technical leadership and guidance for the deployment of new unit technologies. Represents the unit on campus committees to develop technical standards and direction. Provides technical oversight for the mentoring, training, and development of other unit employees.

DUTIES

Typical:
- May supervise one or more individuals
- Provides technical oversight and training for conducting research of problems and the formulation of recommended solutions for customers;
- Serves as a resource for internal and external customers;
- Responsible for strategic planning for unit’s IT;
- Oversees budget plan and process for unit’s IT resources; and
- Provides leadership and representation as appropriate to university groups or committees and or outside constituencies.

ENGAGES IN TWO OR MORE OF THE FOLLOWING FUNCTIONS:

Systems
- Coordinates the development of technical specifications based on input from the customers; and
- Coordinates the evaluation of hardware and software products and programming languages, determine their strategic applicability to the unit’s systems and projects.

Service
- Coordinates the evaluation of workstation hardware and software products to determine their strategic applicability to the computing environment.

Applications
- Coordinates the design, coding, testing, review, and documentation of applications or substantial application modifications;
- Coordinates the evaluation of hardware and software products and programming languages, determine their strategic applicability to the unit’s systems and projects; and
- Coordinates the development of standards for unit level systems and programming.

Database management
- Coordinates the design, coding, testing and documentation of unit level database, database applications or substantial application modifications;
- Coordinates the evaluation of hardware and software products and programming languages, determines their strategic applicability to the unit’s systems and projects; and
- Coordinates the development of standards for unit level systems and programming.

**SUPERVISION**

**Received:** General instructions and periodic review from immediate supervisor.

**Given:** Detailed initial instruction and periodic review to assigned staff.

**EDUCATION AND EXPERIENCE**

**Required:** Bachelor's degree or any equivalent combination of training and experience. One year of experience may substitute for one year of education. Twelve years of related experience. Ability to multi-task and work cooperatively with others.

**Preferred:** None.

**LICENSES, CERTIFICATES OR REGISTRATION**

**Required:** None.

**Preferred:** None.

**EQUIPMENT**

**Typical:** Use of computing equipment.

**KNOWLEDGE, ABILITIES AND SKILLS**

**Typical:** Must be able to work in a collaborative team environment. Must have strong interpersonal skills.
SUMMARY

General Description: The Senior Information Technology Professional II position is designed to meet the IT needs of a unit where multifaceted expertise is required. This position includes the general responsibilities listed below plus two or more of the specialty areas of systems, service, applications, and or database management and may include any appropriate duties listed in the Senior Information Technology Professional I position description. Routinely provides technical leadership for multiple complex unit-level projects or operations utilizing multiple technical fields. Develops technical standards for implementing unit’s projects or operations. Serves as a chair or senior member of an information resource team responsible for setting technical standards and direction. Participates in mentoring, training, and development of other employees.

DUTIES

Typical:
- May supervise one or more individuals
- Provides technical oversight and training for conducting research of problems and the formulation of recommended solutions for customers;
- Serves as a resource for internal and external customers;
- Assists in strategic planning for computing and communication;
- Develops budget plans for unit’s it resources;
- May serve as unit liaison to university groups or committees; and
- Performs other related duties as required.

ENGAGES IN TWO OR MORE OF THE FOLLOWING FUNCTIONS:

Systems
- Leads the design and development of systems software for multiple projects;
- Works independently or with vendor field engineers to resolve hardware problems;
- Plans and organizes the installation and maintenance of both critical and non-critical software and hardware;
- Ensures the documentation of all changes to systems software and the development of entries for a systems support database;
- Plans, organizes and controls areas of the computing environment such as production control, disaster recovery, networking, or computer operations; and
- Initiates purchases of hardware and software upgrades.

Service
- Provides technical leadership for the unit’s computing services;
- Helps coordinate the development of computing support standards;
- Manages service operations; and
- Monitors customer service and ensures all service standards are being met.

Applications
- Provides technical leadership for the design, coding, testing, review, and documentation of programs, program modifications, or applications;
- Develops specifications and project plans based on input from customers;
• Plans the development of system and programming standards; and
• Reviews the design specifications for other developers.

**Database management**
• Provides technical leadership for the planning, organizing and controlling of activities related to database systems;
• Oversees the management of the database schema;
• Oversees the monitoring of the performance of database systems;
• Ensures the resolution of performance problems and recovers from system outages;
• Ensures the development and documentation of security procedures and data standards; and
• Serves as a senior technical consultant with broad consulting responsibility.

**SUPERVISION**

**Received:** General instructions and periodic review from immediate supervisor.

**Given:** Detailed initial instruction and periodic review to assigned staff.

**EDUCATION AND EXPERIENCE**

**Required:** Bachelor’s degree or any equivalent combination of training and experience. One year of experience may substitute for one year of education. Eight years of related experience. Ability to multi-task and work cooperatively with others.

**Preferred:** None.

**LICENSES, CERTIFICATES OR REGISTRATION**

**Required:** None.

**Preferred:** None.

**EQUIPMENT**

**Typical:** Use of computing equipment.

**KNOWLEDGE, ABILITIES AND SKILLS**

**Typical:** Must be able to work in a collaborative team environment. Must have strong interpersonal skills.
SUMMARY

General Description: The Senior Information Technology Professional I position is designed to meet the IT needs of a unit where multifaceted expertise is required. This position includes the general responsibilities listed below plus two or more of the specialty areas of systems, service, applications, and/or database management and may include any appropriate duties listed in the Information Technology Professional II position description. Routinely provides technical leadership for a unit-level project or operation, which relies on multiple technical fields. Routinely provides technical oversight for the application of and compliance with unit’s technical standards. May, coordinate the technical activities of a project team. Completes reports and summaries for management and/or users including, project status reports, problem reports, and progress summaries.

DUTIES

Typical:
- May supervise one or more individuals
- Provides technical oversight and training for conducting research of problems and the formulation of recommended solutions for customers;
- Serves as a resource for internal and external customers;
- May serve on unit committees; and
- Performs other related duties as required.

ENGAGES IN TWO OR MORE OF THE FOLLOWING FUNCTIONS:

Systems
- May serve as a technical lead in research, implementation and deployment of systems software;
- Coordinates the installation and maintenance of both critical and non-critical software;
- Provides technical guidance for the development of computing plans for customers;
- Provides technical guidance and coordination with CIS for network plans for customers;
- Coordinates, designs and tests disaster recovery plans;
- Resolves configuration system performance issues;
- Develops specifications for large and complex purchases of network server hardware; and
- Provides technical guidance, monitoring and maintaining system security, and for protecting and recovering data.

Service
- Provides technical guidance for the customer problem tracking process;
- Provides technical oversight and training to be provided to customers on the advanced use of widely used applications and/or various specialized software applications;
- Provides technical guidance for the advice and education given to customers on computing security policies and procedures;
- Develops print and web-based technical support information for customer use;
- Provides technical oversight and training for conducting surveys of new technologies and the preparation of executive summaries;
- May provide technical guidance for the installation/maintenance of software on various operating systems; and
- May provide technical oversight of consulting and training provided to customers on off the shelf applications.
Applications
- Makes coding design decisions;
- Creates and evaluates test plans;
- Collaborates with the project leader to develop work plan and time schedules for computing projects including outlining phases;
- Identifies personnel and computing equipment requirements;
- Makes recommendations based on the evaluation of software products and programming languages for their applicability to the system and/or project;
- Provides technical guidance and/or training to application users to ensure the success of an application;
- Coordinates the review and analysis of software project objectives to facilitate a successful project;
- Ensures consistency with design documentation;
- Participates in the development of system and programming standards;
- Develops standards and procedures regarding software application information for customer use; and
- Provides technical oversight and training for programming.

Database management
- Plans, organizes and controls the activities related to database systems;
- Makes recommendations based on the evaluation of software products and programming languages for their applicability to the database system and/or project; and
- Installs, tests, and maintains database management systems and related systems.

SUPERVISION

Received: General instructions and periodic review from immediate supervisor.

Given: Detailed initial instruction and periodic review to assigned staff.

EDUCATION AND EXPERIENCE

Required: Bachelor's degree or any equivalent combination of training and experience. One year of experience may substitute for one year of education. Five years of related experience. Ability to multi-task and work cooperatively with others.

Preferred: None.

LICENSES, CERTIFICATES OR REGISTRATION

Required: None.
Preferred: None.

EQUIPMENT

Typical: Use of computing equipment.

KNOWLEDGE, ABILITIES AND SKILLS

Typical: Must be able to work in a collaborative team environment. Must have strong interpersonal skills.
SUMMARY

General Description: The IT Professional II position is designed to meet the IT needs of a unit where multifaceted expertise is required. This position includes the general responsibilities listed below plus two or more of the specialty areas of systems, service, applications, and or database management and may include any appropriate duties listed in the IT Professional I position description. Routinely performs advanced, troubleshooting, analysis, and problem-solving for unit-level support in multiple technical fields.

DUTIES

Typical:
- May direct the efforts of one or more individuals;
- Provides technical oversight and training for conducting research of problems and the formulation of recommended solutions for customers;
- Serves as a resource for internal and external customers; and
- Performs other related duties as required.

ENGAGES IN TWO OR MORE OF THE FOLLOWING FUNCTIONS:

Systems
- Resolves hardware and software problems with vendor technical support;
- Repairs hardware problems;
- Installs, configures and maintains both critical and non-critical software and hardware;
- Provides primary administration responsibility for a basic software products or system;
- Prepares specifications for purchases of hardware and software upgrades; and
- Assists with production control, disaster recovery, networking, computer operations, or other operating systems.

Service
- Develops computing plans for customers;
- Provides technical oversight of computing systems testing and applications;
- Troubleshoots routine network problems;
- Provides support for infrastructure connection in emergencies or changing environments; and
- Purchases new hardware and software and tracks it inventory assets.

Applications
- Consults with users to define application requirements, identifies programming and output needs, verifies preliminary design and output;
- Recommends technical and procedural design for new or revised applications including flow charts, system specifications, programming guidelines and code review;
- Answers questions and provides technical assistance and/or training to application users; and
- May serve as lead developer on a small application or assist the lead on larger applications.

Database management
- Assists with planning, organizing and controlling the activities related to database systems in multi-platform environments;
- Evaluates software products and programming tools to determine their applicability to a specific database system and/or project;
- Resolves performance problems and recovers from system outages; and
- Manages the schema of database components.

**SUPERVISION**

**Received:** General instructions and periodic review from immediate supervisor.

**Given:** May provide detailed initial instruction and periodic review to Information Technology Professional I positions.

**EDUCATION AND EXPERIENCE**

**Required:** Bachelor's degree or any equivalent combination of training and experience. One year of experience may substitute for one year of education. Three years of related experience. Ability to multi-task and work cooperatively with others.

**Preferred:** None.

**LICENSES, CERTIFICATES OR REGISTRATION**

**Required:** None.

**Preferred:** None.

**EQUIPMENT**

**Typical:** Use of computing equipment.

**KNOWLEDGE, ABILITIES AND SKILLS**

**Typical:** Must be able to work in a collaborative team environment.
SUMMARY

General Description: The IT Professional I position is designed to meet the IT needs of a unit where multifaceted expertise is required. This position includes the general responsibilities listed below plus two or more of the specialty areas of systems, service, applications, and/or database management. Routinely performs unit-level support in multiple technical fields.

DUTIES

Typical:
- Confers with other personnel in resolving problems involving procedural and technical matters;
- Researches problems and recommends solutions;
- Provides resource estimates and progress reports;
- Ensures that all work is accurate and in compliance with departmental or project quality standards;
- Participates in training and professional development sessions;
- Provides on-call support on nights and weekends as needed;
- Ensures security of customer data and applications in all phases of production;
- Ensures compliance with all applicable policies, rules, and procedures; and
- Performs other related duties as required.

ENGAGES IN TWO OR MORE OF THE FOLLOWING FUNCTIONS:

Systems
- Provides assistance in resolving hardware and software problems with vendor technical support;
- Assists with the installation and maintenance of both critical and non-critical software;
- Documents all changes to systems software and develops entries for a systems support database;
- Implements software and hardware upgrades;
- Learns procedures to maintain systems software;
- Assists with the installation and configuration of network file servers and hardware;
- Monitors and maintains system security; and
- Assists in developing specifications for server hardware purchases.

Service
- Installs, upgrades and configures workstation and software;
- Provides technical guidance and support to junior employees on software installation procedures;
- Investigates, recommends and assists customers with workstation software purchases;
- Troubleshoots and repairs hardware and software for workstations;
- Troubleshoots and repairs configuration problems;
- Assists with troubleshooting network problems;
- Provides recovery support for customer data; and
- Documents computing support methods and procedures.

Applications
- Reviews, modifies and/or writes program code and/or scripts as needed, writes documentation of system procedures and guidelines for application users, as well as programs and program modifications;
- Resolves problems by reviewing and analyzing software documentation and production outputs to identify causes, solutions, and/or make appropriate referrals;
- Distributes and/or installs custom application software and provides training to the customer or to other technical staff; and
- Tests new code and applications.

**Database management**
- Assists with managing the schema of database components;
- Monitors the performance of database systems; and
- Writes coding and schema for database projects.

**SUPERVISION**

**Received:** General instructions and periodic review from immediate supervisor.

**Given:** None.

**EDUCATION AND EXPERIENCE**

**Required:** Bachelor's degree or any equivalent combination of training and experience. One year of experience may substitute for one year of education. Two years of related experience. Ability to multi-task and work cooperatively with others.

**Preferred:** None.

**LICENSES, CERTIFICATES OR REGISTRATION**

**Required:** None.
**Preferred:** None.

**EQUIPMENT**

**Typical:** Use of computing equipment.

**KNOWLEDGE, ABILITIES AND SKILLS**

**Typical:** Must be able to work in a collaborative team environment.