

# Lakeland

COMMUNITY COLLEGE

INFORMATION TECHNOLOGY  
AND COMPUTER SCIENCE

## **CAREER SKILLS FOR** Application Programming and Development



### **ADDITIONAL RESOURCES**

Android  
[developer.android.com](http://developer.android.com)

Apple  
[developer.apple.com](http://developer.apple.com)

Association of Information Technology  
Professionals (AITP)  
[aitp.org](http://aitp.org)

### **FOR MORE INFORMATION CONTACT:**

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 Opportunity  
starts **HERE**  
[lakelandcc.edu](http://lakelandcc.edu)



Graduates of the Application Programming and Development concentration gain experience in developing mobile applications for both Apple iOS and Android. Use this fact sheet to investigate your academic and career options, and to master your job search.

## **JOB-SPECIFIC SKILLS**

*Skills and knowledge you will obtain at Lakeland to prepare for a successful career in the field.*

### **HARDWARE/SOFTWARE SKILLS:**

- Conduct hardware operation and troubleshooting
- Configure workstations on a network
- Understand the hardware and software used in a network (servers, switches and routers)
- Design GUIs for both phones and tablets
- Create applications with multiple screens
- Create menus
- Use dialogs and pickers in applications
- Use graphics to enhance applications
- Use SQLite in mobile applications

### **PROGRAMMING SKILLS:**

- Carry out systems analysis and designs
- Use logic and problem solving
- Design applications for both Apple and Android mobile environments

### **DATABASE SKILLS:**

- Utilize basic relational database skills
- Create tables for use in mobile applications
- Execute basic SQL query, insert and update commands

### **DESKTOP OPERATING SYSTEMS AND NETWORK SKILLS:**

- File management (organize, file and store)
- Knowledge of how specific operating systems work (Windows, Mac, iOS and Android)
- Knowledge of local area networking (LAN), wide area networking (WAN) and telecommunications protocols
- Support various environments

### **GENERAL MANAGEMENT SKILLS:**

- Decision making
- Leadership
- Presentation preparation
- Project management
- Set up and maintain documentation and standards
- Plan growth and changes (capacity planning)
- Understand core business functions and how information technology interrelates with business

# TRANSFERABLE SKILLS

*Skills you have acquired throughout your life that will help you excel in the field include:*

- Ability to multitask
- Leadership
- Logical thinking
- Organizational proficiency
- Penchant for learning
- Problem-solving
- Verbal and written communication



# PERSONAL ATTRIBUTES

*These nontechnical attributes will enable you to be a competent, reliable employee in any company.*

- Accurate
- Adaptable
- Analytical
- Collaborative
- Creative
- Critical thinker
- Customer-focused
- Deadline-oriented
- Detail-oriented
- Demonstrate initiative
- Efficient
- Ethical
- Flexible
- Honest
- Independent
- Investigative
- Logical
- Organized
- Patient
- Personable
- Problem solver
- Professional presence
- Questioning
- Quick learner
- Respectful
- Self-motivated



# RELATED JOB TITLES

*Note: This is only a representative list and does not exhaust all possible titles in the field.*

- Application designer
- Mobile application developer
- Programmer
- Software engineer

*\* Some positions may require a bachelor's degree or higher and/or vendor certification.*

# POSSIBLE EMPLOYERS

*Note: This is only a representative list and does not exhaust all types of employers.*

- Banks and financial institutions
- Consulting companies
- Education institutions
- Government agencies
- Health care facilities
- Insurance providers
- Manufacturing companies
- Nonprofit organizations
- Public accounting firms
- Real estate companies
- Research facilities
- Retail businesses
- Self-employment
- Service agencies
- Technology companies
- Wholesale companies



# QUICK FACTS



## Software Developer Labor Statistics (national averages)

2016 Median Pay	\$102,280 per year/\$49.17 per hour
Typical Entry-level Education	Bachelor's Degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2014	1,114,000
Job Outlook, 2014-24	17% (Much faster than average)
Employment Change, 2014-24	186,600

Source: Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook.  
<http://www.bls.gov/ooh/computer-and-information-technology/software-developers.htm>  
 Statistics accessed April 30, 2017.

