The Linux operating system provides powerful open source solutions which offer increased stability, higher levels of security, and lower cost than commercial operating systems. Linux is particularly attractive to small- and mid-sized businesses, and interest in Linux is high and growing rapidly.

There are a variety of applications available for Linux today and many of these open source solutions have been ported to run within a Windows environment as well. Many of these programs are gaining a large foothold in the business community, and the demand for skilled professionals in this area is high. The Linux Certificate will provide students with the fundamental knowledge needed to work in a Linux/Open Source environment. Students enrolled in this Certificate program must have a solid background in computer use and significant experience with at least the Windows or Mac OS X operating system.

Note: The LINUX Certificate is a rigorous program. Students are expected to spend additional time beyond the minimum to complete requirements and achieve success. Students are also required to have college level reading, writing and math skills prior to enrollment.

Students will be able to:
- Analyze a problem, and identify and define the computing requirements appropriate to its solution.
- Design, implement and evaluate a computer-based process or program to meet desired needs.
- Use current techniques, skills, and tools necessary for computing practices.
- Demonstrate a familiarity with state-of-the-art programming techniques, tools, and practices.
- Demonstrate a solid foundation in the fundamental areas of computer science - which are algorithms, systems, and software - and exposure to multiple sub-disciplines of computer science.
- Understand professional, ethical, legal, security, and social issues and responsibilities related to IT, to include an understanding of cross-cultural issues and global perspectives.
- Use written and oral communication skills necessary to be effective in the IT industry.
- Recognize the need to maintain currency with future changes in the computing profession.
- Use creative and critical thinking processes to work independently and/or collaboratively to develop complex solutions, and take the lead to implement those solutions.
- Function effectively on teams to accomplish a common goal.
- Through the use of an online portfolio, students will assess and reflect upon their own learning and create a cumulative portfolio of their "best" work.

How Much Can I Expect to Earn?

To learn more about potential earnings visit: Bureau of Labor Statistics Occupational Outlook Handbook

View online at
www.greatbay.edu/GElinux

Occupations/Outlook Trends

For more information about the outlook and trends for the Computer Technologies industry, please visit:

http://www.bls.gov/

Why Computer Technologies at Great Bay?

- Articulation agreements to a variety of New England colleges and universities.
- Small class size and individual attention from instructors and advisors.
- Credentialed faculty with extensive industry experience.

Gainful Employment Disclosure:

320 Corporate Drive. Portsmouth, NH 03801
603.427.7600
**Computer Technologies: Linux Certificate Program**

**CERTIFICATE REQUIREMENTS**

**Linux Certificate Courses:**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Prerequisites (p)/ Corequisites (c)</th>
<th>Credits</th>
<th>Semester</th>
<th>Grade Earned</th>
<th>Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS113G</td>
<td>Database Design and Management</td>
<td>Placement testing or CIS110G or CIS107G (p)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS146G</td>
<td>Linux I</td>
<td>CIS112G (p)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CIS149G</td>
<td>Linux Applications</td>
<td></td>
<td>3</td>
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<td></td>
<td></td>
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<tr>
<td>CIS216G</td>
<td>Web Server Administration</td>
<td>CIS146G and CIS224G (p)</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>CIS246G</td>
<td>Linux II</td>
<td>CIS146G (p)</td>
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<td></td>
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<tr>
<td>CIS249G</td>
<td>Linux Databases</td>
<td>CIS113G and CIS146G (p)</td>
<td>3</td>
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<tr>
<td>CIS254G</td>
<td>PHP and MySQL</td>
<td>CIS113G and CIS224G (p)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Only courses above the 100 level can be applied toward the certificate.

**Total Credits** 21

**SUCCESS STRATEGIES**

- Take English and Math in your first semester.
- Meet with your Academic Advisor every semester.
- Explore Transfer opportunities.
- Take advantage of Tutoring Services.
- Consider Summer courses to catch up or get ahead.
- Maintain an overall GPA of 2.0 to graduate.
- Check your student email daily.

**YOUR PATHWAY TO AN ASSOCIATE DEGREE**

This ACADEMIC MAP keeps you on track to graduate in two years.