# **Numerical Analysis**

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| 05 | Error, Approximate Equality, and Asymptotic Order Notation – Topics 3 |
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| 07 | A Word on Computer Language and Software |
| 08 | Simple Approximations |
| 09 | Application: Approximating the Natural Logarithm |
| 10 | A Brief History of Computing |
| 11 | Literature Review |
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| 14 | Difference Approximations to the Derivative |
| 15 | Application: Euler’s Method for Initial Value Problems |
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| 21 | Newton’s Method: Derivation and Examples |
| 22 | How to Stop Newton’s Method |
| 23 | Application: Division Using Newton’s Method |
| 24 | The Newton Error Formula |
| 25 | Newton’s Method: Theory and Convergence |
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| 27 | The Secant Method: Derivation and Examples |
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| 35 | Very High-order Methods and the Efficiency Index |
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| 58 | Improving the Trapezoid Rule |
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| 99 | Iterative Methods for Linear Systems: A Brief Survey |
| 101 | Nonlinear Systems: Newton’s Method and Related Ideas – Topics 2 |
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| 08 | Ethics in the Business World – Topics 4 |
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| 22 | IT Professionals – Topics 7 |
| 25 | IT Users – Topics 3 |
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| 30 | IT Security Incidents: A Major Concern |
| 36 | Implementing Trustworthy Computing – Topics 6 |
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|  | **Freedom of Expression** |
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| 47 | First Amendment Rights – Topics 2 |
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| 83 | The Impact of IT on the Standard of Living and Worker Productivity – Topics 2 |
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|  | **Social Networking** |
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| 89 | What Is a Social Networking Web Site? |
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|  | **Ethics of IT Organizations** |
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| 101 | Key Ethical Issues for Organizations – Topics 1 |
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# **Software Security**

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| 192 | Securing IaaS | Public IaaS Versus Private Network Security |
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| 12 | How to Speak Crypto |
| 20 | Classic Crypto – Topics 8 |
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