

## Table of Contents

|   |    |
|---|----|
| 1. <b>Introduction</b> .....                          | 1  |
| 2. <b>Intrusion Detection Systems</b> .....           | 2  |
| 2.1 Types of Intrusion Detection Systems .....        | 2  |
| 2.1.1 Host based intrusion detection systems .....    | 2  |
| 2.1.2 Network based intrusion detection systems ..... | 3  |
| 2.1.3 Hybrid based intrusion detection systems .....  | 4  |
| 2.2 Types of Network Attacks .....                    | 4  |
| 3. <b>Hierarchical Task Analysis</b> .....            | 6  |
| 3.1 Network Security Administrator .....              | 7  |
| 3.2 Functions of Network Security Administrator ..... | 7  |
| 4. <b>Diagrams</b> .....                              | 9* |
| 5. <b>Task Descriptions</b> .....                     | 17 |
| Develop security policy .....                         | 17 |
| Select a intrusion detection system .....             | 28 |
| Harden and secure network and servers .....           | 31 |
| Prepare for intrusion detection .....                 | 44 |
| Detect intrusion .....                                | 55 |
| Respond to intrusion .....                            | 68 |
| Improve .....   | 76 |
| 6. <b>Validation of Task Analysis</b> .....           | 80 |
| 6.1 Results of Validation .....                       | 81 |
| 7. <b>Conclusion and Further Steps</b> .....          | 84 |
| 8. <b>References</b> .....                            | 85 |
| 9. <b>Bibliography</b> .....                          | 86 |

\* Diagrams are also attached (as TIFF files) to the PDF file.