> CISA® Certified Information Systems Auditor  
An ISACA® Certification <


Median (MD) / Minimum (Min.) / Maximum (Max.) der EQF-Stufen ...

... über alle Teilprozesse und Kategorien  
[S. 1; Größe der Auswertungseinheit: N]

... je Kategorie über alle Teilprozesse  
[S. 1; Größe der Auswertungseinheit: N]

... je Kategorie in den Teilprozessen  
[S. 2; Größe der Auswertungseinheit: N]

N = Fallzahl; F = davon fehlend


### Zusammenfassende Mediane

<table>
<thead>
<tr>
<th>Kategorie</th>
<th>Median der EQF-Stufe über alle Teilprozesse und Fälle</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Kenntnisse&quot;</td>
<td></td>
<td></td>
<td>4</td>
<td>7</td>
<td>46</td>
<td>0</td>
</tr>
<tr>
<td>&quot;Fertigkeiten&quot;</td>
<td></td>
<td></td>
<td>4</td>
<td>7</td>
<td>46</td>
<td>0</td>
</tr>
<tr>
<td>&quot;Kompetenz&quot;</td>
<td></td>
<td></td>
<td>5</td>
<td>6</td>
<td>46</td>
<td>0</td>
</tr>
</tbody>
</table>

Werte je Kategorie in den Teilprozessen über alle Fälle  
und je Teilprozess über alle Kategorien und Fälle
### Weiterbildungserscheinung
entsprechend CISA Review Manual 2013

#### Erlernte Kompetenzlevel je EQF-Kategorie in den Teilprozessen über alle Fälle

<table>
<thead>
<tr>
<th>Teilprozess</th>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2 Management of the IS Audit Function (S. 29)</td>
<td>Kenntnisse</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Fertigkeiten</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Über alle Kategorien</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teilprozess</th>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3 ISACA IT Audit and Assurance Standards and Guidelines (S. 31)</td>
<td>Kenntnisse</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Kompetenz</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Über alle Kategorien</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teilprozess</th>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4 Risk Analysis (S. 43)</td>
<td>Kenntnisse</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Über alle Kategorien</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teilprozess</th>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5 Internal Controls (S. 45)</td>
<td>Kenntnisse</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Fertigkeiten</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Über alle Kategorien</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>1.6 Performing an IS Audit (S. 48)</td>
<td>1.6.1 Classification of Audits</td>
<td>1.6.2 Audit Programs</td>
<td>1.6.3 Audit Methodology</td>
<td>1.6.4 Fraud Detection</td>
<td>1.6.5 Risk-based Auditing</td>
<td>1.6.6 Audit Risk and Materiality</td>
</tr>
<tr>
<td>5</td>
<td>EQF-Kategorien</td>
<td>MD</td>
<td>Min.</td>
<td>Max.</td>
<td>N</td>
<td>F</td>
</tr>
<tr>
<td>Kenntnisse</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1.7 Control Self-assessment (S. 62)</td>
<td>1.7.1 Objectives of CSA</td>
<td>1.7.2 Benefits of CSA</td>
<td>1.7.3 Disadvantages of CSA</td>
<td>1.7.4 Auditor Role in CSA</td>
<td>1.7.5 Technology Drivers for CSA</td>
<td>1.7.6 Traditional vs. CSA Approach</td>
</tr>
<tr>
<td>6</td>
<td>EQF-Kategorien</td>
<td>MD</td>
<td>Min.</td>
<td>Max.</td>
<td>N</td>
<td>F</td>
</tr>
<tr>
<td>Kenntnisse</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1.8 The Evolving IS-Audit Process (S. 64)</td>
<td>1.8.1 Integrated Auditing</td>
<td>1.8.2 Continuous Auditing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>EQF-Kategorien</td>
<td>MD</td>
<td>Min.</td>
<td>Max.</td>
<td>N</td>
<td>F</td>
</tr>
<tr>
<td>Kenntnisse</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Chapter 2: Governance and Management of IT (S. 69)

| 2.2 Corporate Governance (S. 83) |
|---|---|---|---|---|---|---|---|
| 8 | EQF-Kategorien | MD | Min. | Max. | N | F |
| Kenntnisse | 3 | 3 | 3 | 1 | 0 |
| Fertigkeiten | 3 | 3 | 3 | 1 | 0 |
| Kompetenz | 5 | 5 | 5 | 1 | 0 |
| Über alle Kategorien | 3 | 3 | 5 | 3 | 0 |

<table>
<thead>
<tr>
<th>2.3 IT-Governance (S. 83)</th>
<th>2.3.1 Best Practices for IT Governance</th>
<th>IT Governance and Management Frameworks</th>
<th>Audit Role in IT Governance</th>
<th>2.3.2 IT Governance Committees</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>EQF-Kategorien</td>
<td>MD</td>
<td>Min.</td>
<td>Max.</td>
</tr>
<tr>
<td>Kenntnisse</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>
## 2.9 Information Systems Management Practices (S. 97)

### 2.9.1 Human Resource Management
- Hiring
- Employee Handbook
- Promotion Policies
- Training
- Scheduling and Time Reporting
- Employee Performance Evaluations
- Required Vacations
- Termination Policies

### 2.9.2 Sourcing Practices
- Outsourcing Practices and Strategies
- Industry Standards/Benchmarking
- Globalization Practices and Strategies
- Cloud Computing
- Outsourcing and Third-party Audit Reports
- Governance in Outsourcing
- Capacity and Growth Planning
- Third-party Service Delivery Management
- Service Improvement and User Satisfaction

### 2.9.3 Organizational Change Management

### 2.9.4 Financial Management Practices
- IT Budgets
- Software Development

### 2.9.5 Quality Management

### 2.9.6 Information Security Management

### 2.9.7 Performance Optimization

## 2.10 IS Organizational Structure and Responsibilities (S. 107)

### 2.10.1 IS Roles and Responsibilities
- Vendor and Outsourcer Management
- Infrastructure Operations and Maintenance
- Media Management
- Data Entry
- Systems Administrations
- Security Administrations
- Quality Assurance
- Database Administration
- System Analyst
- System Architect
- Applications Development and Maintenance
- Infrastructure Development and Maintenance
- Network Management

### 2.10.2 Segregations of Duties Within IS

### 2.10.3 Segregations of Duties Controls
- Transaction Authorization
- Custody of Assets
- Access to Data
- Compensating Controls for Lack of Segregation of Duties

## 2.11 Auditing IT Governance Structure and Implementation (S. 113)

### 2.11.1 Reviewing Documentation

### 2.11.2 Reviewing Contractual Commitments

---

### Table 1: EQF-Kategorien

<table>
<thead>
<tr>
<th>Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

---
### 2.12 Business Continuity Planning (S. 114)

- **2.12.1 IS Business Continuity Planning**
- **2.12.2 Disasters or Other Disruptive Events**
  - Pandemic Planning
  - Dealing With Damage to Image, Reputation or Brand
- **2.12.3 Business Continuity Planning Process**
- **2.12.4 Business Continuity Policy**
- **2.12.5 Business Continuity Planning Incident Management**
- **2.12.6 Business Impact Analysis**
- **2.12.7 Development of Business Continuity Plans**
- **2.12.8 Other Issues in Plan Development**
- **2.12.9 Components of a Business Continuity Plan**
  - Key Decision-making Personnel
  - Backup of Required Supplies
  - Insurance
- **2.12.10 Plan Testing**
  - Specification
  - Test Execution
  - Documentation of Results
  - Results Analysis
- **2.12.11 Summary of Business Continuity**

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

### 2.13 Auditing Business Continuity (S. 125)

- **2.13.1 Reviewing the Business Continuity Plan**
  - Reviewing the Document
  - Review the Applications Covered by the Plan
  - Review the Business Continuity Plan
  - Plan Testing
- **2.13.2 Evaluation of Prior Test Results**
- **2.13.3 Evaluation of Offsite Storage**
- **2.13.4 Interviewing Key Personnel**
- **2.13.5 Evaluation of Security at Offsite Facility**
- **2.13.6 Reviewing Alternative Processing Contract**
- **2.13.7 Reviewing Insurance Coverage**

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

### Chapter 3: Information Systems Acquisition, Development and Implementation (S. 131)

### 3.2 Benefits Realization (S. 143)

- **3.2.1 Portfolio/Program Management**
- **3.2.2 Business Case Development and Approval**
- **3.2.3 Benefits Realization Techniques**

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

### 3.3 Project Management Structure (S. 145)

- **3.3.1 General Aspects**
- **3.3.2 Project Context and Environment**
- **3.3.3 Project Organizational Forms**
- **3.3.4 Project Communication and Culture**
- **3.3.5 Project Objectives**
- **3.3.6 Roles and Responsibilities of Groups and Individuals**

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
### 3.4 Project Management Practices (S. 149)

- **3.4.1 Initiation of a Project**
- **3.4.2 Project Planning**
  - Software Size Estimation
  - Function Point Analysis
  - FPA Feature Points
  - Cost Budgets
  - Software Cost Estimation
  - Scheduling and Establishing the Time Frame
  - Critical Path Methodology
  - Gantt Charts
  - Program Evaluation Review Technique
  - Timebox Management
- **3.4.3 Project Controlling**
  - Management of Scope Changes
  - Management of Resource Usage
  - Management of Risk
- **3.4.4 Closing a Project**

### 3.5 Business Application Development (S. 155)

- **3.5.1 Traditional SDLC Approach**
- **3.5.2 Description of Traditional SDLC Phases**
  - Phase 1 - Feasibility Study
  - Phase 2 - Requirements Definition
  - Phase 3A - Software Selection and Acquisition
  - Phase 3B - Design
  - Phase 4A - Development
  - Phase 4B - Configuration
  - Phase 5 - Final Testing and Implementation
  - Phase 6 - Postimplementation Review
- **3.5.3 Integrated Resource Management Systems**
- **3.5.4 Risk Associated With Software Development**

---

#### EQF-Kategorien

<table>
<thead>
<tr>
<th>Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

---

22

23
### 3.6 Business Application Systems (S. 172)

3.6.1 Electronic Commerce
- E-commerce Models
- E-commerce Architecture
- E-commerce Risks
- E-commerce Requirements
- E-commerce Audit and Control Issues (Best Practices)

3.6.2 Electronic Data Interchange
- General Requirements
- Traditional EDI
- Web-based EDI

3.6.3 EDI Risks and Controls

3.6.4 Controls in EDI Environment
- Receipt of Inbound Transactions
- Outbound Transactions
- Auditing EDI

3.6.5 Electronic Mail
- Security Issues of Email
- Standards for Email Security

3.6.6 Point-of-sale Systems

3.6.7 Electronic Banking
- Risk Management Challenges in E-banking
- Risk Management Controls for E-banking

3.6.8 Electronic Finance

3.6.9 Payment Systems
- Electronic Money Model
- Electronic Checks Model
- Electronic Transfer Model

3.6.10 Integrated Manufacturing Systems

3.6.11 Electronic Funds Transfer
- Controls in an EFT Environment

3.6.12 Automated Teller Machine
- Audit of ATM

3.6.13 Interactive Voice Response

3.6.14 Purchase Accounting System

3.6.15 Image Processing

3.6.16 Artificial Intelligence and Export Systems

3.6.17 Business Intelligence
- Business Intelligence Governance

3.6.18 Decision Support Systems
- Efficiency vs. Effectiveness
- Decision Focus
- DSS Frameworks
- Design and Development
- Implementation and Use
- Risk Factors
- Implementation Strategies
- Assessment and Evaluation

DSS Common Characteristics

DSS Trends

3.6.19 Customer Relationship Management

3.6.20 Supply Chain Management

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

### 3.7 Development Methods (S. 190)

3.7.1 Use of Structured Analysis, Design and Development Techniques

3.7.2 Agile Development

3.7.3 Prototyping-evolutionary Development

3.7.4 Rapid Application Development

3.7.5 Object-oriented System Development

3.7.6 Component-based Development

3.7.7 Web-based Application Development

3.7.8 Software Reengineering

3.7.9 Revere Engineering

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
### 3.8 Infrastructure Development/Acquisition Practices (S. 195)

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kompetenz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 3.8.1 Project Phases of Physical Architecture Analysis
- Review of Existing Architecture
- Anlaysis and Design
- Draft Functional Requirement
- Vendor and Product Selection
- Writing Functional Requirements
- Proof of Concept

#### 3.8.2 Planning Implementation of Infrastructure
- Procurement Phase
- Delivery Time
- Installation Plan
- Installation Test Plan

#### 3.8.3 Critical Success Factors

#### 3.8.4 Hardware Acquisition
- Acquisition Steps

#### 3.8.5 System Software Acquisition

#### 3.8.6 System Software Implementation

### 3.9 Information Systems Maintenance Practices (S. 201)

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kompetenz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 3.9.1 Change Management Process Overview
- Deploying Changes
- Documentation
- Testing Changed Programs
- Auditing Program Changes
- Emergency Changes
- Deploying Changes Back Into Production
- Change Exposures (Unauthorized Changes)

#### 3.9.2 Configuration Management

### 3.10 System Development Tools and Productivity Aids (S. 205)

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kompetenz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 3.10.1 Code Generators

#### 3.10.2 Computer-aided Software Engineering

#### 3.10.3 Fourth-generation Languages

### 3.11 Process Improvement Practices (S. 207)

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kompetenz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 3.11.1 Business Process Reengineering and Process Change Projects
- BPR Methods and Techniques
- BPR Audit and Evaluation

#### 3.11.2 ISO 9126

#### 3.11.3 Capability Maturity Model Integration

#### 3.11.4 ISO/IEC 15504

### 3.12 Application Controls (S. 210)

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kompetenz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 3.12.1 Input/Origination Controls
- Input Authorization
- Batch Controls and Balancing
- Error Reporting and Handling

#### 3.12.2 Processing Procedures and Controls
- Data Validation and Editing Procedures
- Processing Controls
- Data File Controls Procedures

#### 3.12.3 Output Controls

#### 3.12.4 Business Process Control Assurance
### 3.13 Auditing Application Controls (S. 215)

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 3.13.1 Flow of Transactions Through the System
- Test Application Systems
- Data Integrity Testing
- Continuous Online Auditing

#### 3.13.2 Risk Assessment Model to Analyze Application Controls
- Observing and Testing User Performing Procedures
- Data Integrity in Online Transactions Processing Systems

#### 3.13.3 Observing and Testing User Performing Procedures
- Online Auditing Techniques

### 3.14 Auditing Systems Development, Acquisition And Maintenance (S. 217)

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 3.14.1 Project Management
- Feasibility Study
- Requirement Definition
- Software Acquisition Process

#### 3.14.2 Feasibility Study
- Detailed Design and Development
- Testing

#### 3.14.3 Requirement Definition
- Implementation Phase

#### 3.14.4 Software Acquisition Process
- Postimplementation Review
- System Change Procedures and the Program Migration Process

### Chapter 4: Information Systems Operations, Maintenance and Support (S. 225)

### 4.2 Information Systems Operations (S. 237)

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 4.2.1 Management of IS Operations
- Control Functions
- Service Level

#### 4.2.2 IT Service Management
- Infrastructure Operations
- Job Scheduling

#### 4.2.3 Infrastructure Operations
- Incident and Problem Management
- Process on Incident Handling

#### 4.2.4 Incident and Problem Management
- Problem Management
- Detection, Documentation, Control, Resolution and Reporting of Abnormal Conditions

#### 4.2.5 Support/Help Desk
- Change Management Process
- Release Management

#### 4.2.6 Change Management Process
- Quality Assurance
- Information Security Management

#### 4.2.7 Quality Assurance
- Media Sanitization

### 4.3 Information Systems Hardware (S. 243)

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 4.3.1 Computer Hardware Components and Architectures
- Input/Output Components
- Types of Computers
- Common Enterprise Back-end Devices
- Universal Serial Bus

#### 4.3.2 Hardware Maintenance Program
- Memory Cards/Flash Drives
- Radio Frequency Identification
### EQF-Kategorien MD

<table>
<thead>
<tr>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 4.4 IS Architecture and Software (S. 248)

- **4.4.1 Operating Systems**
  - Software Control Features or Parameters
  - Software Integrity Issues
  - Activity Logging and Reporting Options
- **4.4.2 Access Control Software**
- **4.4.3 Data Communications Software**
- **4.4.4 Data Management**
  - File Organization
- **4.4.5 Database Management System**
  - DBMS Architecture
  - Detailed DBMS Metadata Architecture
  - Data Dictionary/Directory System
  - Database Structure
  - Database Controls
- **4.4.6 Tape and Disk Management Systems**
- **4.4.7 Utility Programs**
- **4.4.8 Software Licensing Issues**
- **4.4.9 Digital Rights Management**

#### 4.5 IS Network Infrastructure (S. 255)

- **4.5.1 Enterprise Network Architectures**
- **4.5.2 Types of Networks**
- **4.5.3 Network Services**
- **4.5.4 Network Standards and Protocols**
- **4.5.5 OSI Architecture**
  - 5.6. Application of the OSI Model in Network Architecture
    - Local Area Network
    - Wide Area Network
    - Wireless Networks
    - Public "Global" Internet Infrastructure
    - Network Administration and Control
    - Applications in a Networked Environment
    - On-demand Computing

#### 4.6 Auditing Infrastructure and Operations (S. 275)

- **4.6.1 Hardware Reviews**
- **4.6.2 Operating System Reviews**
- **4.6.3 Database Reviews**
- **4.6.4 Network Infrastructure and Implementation Reviews**
- **4.6.5 IS Operations Reviews**
- **4.6.6 Scheduling Reviews**
- **4.6.7 Problem Management Reporting Reviews**

#### 4.7 Disaster Recovery Planning (S. 282)

- **4.7.1 Recovery Point Objective and Recovery Time Objective**
- **4.7.2 Recovery Strategies**
- **4.7.3 Recovery Alternatives**
  - Contractual Provisions
  - Procurng Alternatrive Hardware
  - Application Disaster Recovery Methods
  - Data Storage Disaster Recovery Methods
- **4.7.4 Development of Disaster Recovery Plans**
  - IT DRP Contents
  - IT DRP Scenarios
  - Recovery Procedures
- **4.7.5 Organization and Assignment of Responsibilities**
- **4.7.6 Backup and Restoration**
  - On-site Libary Controls
  - Security and Control of On-site Facilities
  - Media and Documentation Backup
  - Types of Backup Devices and Media
  - Periodic Backup Procedures
  - Frequency of Rotation
  - Types of Media and Documentation Rotated
  - Backup Schemes
  - Method of Rotation
  - Record Keeping for Off-site Storage
### 5.2 Importance of Information Security Management (S. 308)

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

### 5.3 Logical Access (S. 324)

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

---

**Chapter 5: Protection of Information Assets (S. 295)**

5.2 Importance of Information Security Management (S. 308)

- Key Element of Information Security Management
- Information Security Management System
- Information Security Management Roles and Responsibilities
- Inventory and Classification of Information Assets
- System Access Permission
- Mandatory and Discretionary Access Controls
- Privacy Management Issues and the Role of IS Auditors
- Critical Success Factors to Information Security Management
- Information Security and External Parties
  - Identification of Risks Related to External Parties
  - Addressing Security When Dealing With Customers
  - Addressing Security in Third-party Agreements
- Human Resources Security and Third Parties
  - Screening
  - Terms and Conditions of Employment
  - During Employment
  - Termination or Change of Employment
  - Removal of Access Rights
- Computer Crime Issues and Exposure
  - Peer-to-peer Computing, Instant Messaging, Data Leakage and Web-based Technologies (e.g., Social Networking, Message Boards, Blogs)
- Security Incident Handling and Response

5.3 Logical Access (S. 324)

- Logical Access Exposures
- Familiarization With the Enterprise's IT Environment
- Paths of Logical Access
  - General Points of Entry
- Logical Access Control Software
- Identification and Authentication
  - Logon IDs and Passwords
  - Token Devices, One-time Passwords
  - Biometrics
  - Single Sign-on
- Authorization Issues
  - Access Control Lists
  - Logical Access Security Administration
  - Remote Access Security
  - Remote Access Using Handheld Devices
  - Access Issues With Mobile Technology
  - Audit Logging in Monitoring System Access
- Naming Conventions for Logical Access Controls
- Storing, Retrieving, Transporting and Disposing of Confidential Information
  - Preserving Information During Shipment or Storage
  - Media-specific Storage Precautions
5.4 Network Infrastructure Security (S. 335)
5.4.1 LAN Security
- LAN Risks and Issues
- Virtualization
- Dial-up Access Controls
5.4.2 Client-server Security
- Client-server Risks and Issues
5.4.3 Wireless Security Threats and Risk Mitigation
5.4.4 Internet Threats and Security
- Network Security Threats
- Passive Attacks
- Active Attacks
- Causal Factors for Internet Attack
- Internet Security Controls
- Firewall Security Systems
- Firewall General Features
- Firewall Types
- Examples of Firewall Implementations
- Firewall Issues
- Firewall Platforms
- Intrusion Detection Systems
- Intrusion Prevention Systems
- Honeypots and Honeynets
5.4.5 Encryption
- Key Elements of Encryption Systems
- Symmetric Key Cryptographic Systems
- Public (Asymmetric) Key Cryptographic Systems
- Elliptical Curve Cryptography
- Quantum Cryptography
- Advanced Encryption Standard
- Digital Signatures
- Digital Envelopes
- Public Key Infrastructure
- Applications of Cryptographic Systems
- Encryption Risks and Password Protection
5.4.6 Viruses
- Virus and Worm Controls
- Management Procedural Controls
- Technical Controls
- Antivirus Software Implementation Strategies
5.4.7 Voice-over IP
- VoIP Security Issues
5.4.8 Private Branch Exchange
- PBX Risks
- PBX Audit
- PBX System Features
- PBX System Attacks
- Hardware Wiretapping
- Hardware Conferencing
- Remote Access
- Maintenance
- Special Manufacturer’s Features
- Manufacturer’s Development and Test Features
- Software Loading and Update Tampering
- Crash-reset Attacks
- Passwords

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
## 5.5 Auditing Information Security Management Framework (S. 358)

### 5.5.1 Auditing Information Security Management Framework
- Reviewing Written Policies, Procedures and Standards
- Logical Access Security Policies
- Formal Security Awareness and Training
- Data Ownership
- Date Owners
- Data Custodians
- Security Administrator
- New IT Users
- Data Users
- Documented Authorizations
- Terminated Employee Access
- Security Baselines
- Access Standards

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

### 5.5.2 Auditing Logical Access

- Familiarization With the IT Environment
- Assessing and Documenting the Access Paths
- Interviewing Systems Personnel
- Reviewing Reports From Access Control Software
- Reviewing Application Systems Operations Manual

### 5.5.3 Techniques for Testing Security
- Terminal Cards und Keys
- Terminal Identification
- Logon IDs and Passwords
- Controls Over Production Resources
- Logging and Reporting of Computer Access Violations
- Follow-up Access Violations
- Bypassing Security and Compensating Controls
- Review Access Controls and Passwords Administration

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

### 5.5.4 Investigation Techniques
- Investigation of Computer Crime
- Computer Forensics
- Protection of Evidence and Chain of Custody

### 5.5.5 Techniques for Testing Security
- Terminal Cards und Keys
- Terminal Identification
- Logon IDs and Passwords
- Controls Over Production Resources
- Logging and Reporting of Computer Access Violations
- Follow-up Access Violations
- Bypassing Security and Compensating Controls
- Review Access Controls and Passwords Administration

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

## 5.6 Auditing Network Infrastructure Security (S. 365)

### 5.6.1 Auditing Remote Access
- Auditing Internet Points of Presence
- Network Penetration Tests
- Full Network Assessment Reviews
- Development and Authorization of Network Changes
- Unauthorized Changes

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
### 5.7 Environmental Exposures and Controls (S. 369)

5.7.1 Environmental Issues and Exposures
5.7.2 Controls for Environmental Exposures
- Alarm Control Panels
- Water Detectors
- Handheld Fire Extinguishers
- Manual Fire Alarms
- Fire Suppression Systems
- Strategically Locating the Computer Room
- Regular Inspection by Fire Department
- Fireproof Walls, Floors and Ceiling of the Computer Room
- Electrical Surge Protectors
- Uninterruptible Power Supply/Generator
- Emergency Power-off Switch
- Power Leads From Two Substations
- Wiring Placed in Electrical Panels and Conduit
- Inhibited Activities Within the IPF
- Fire-resistant Office Materials
- Documented and Tested Emergency Evacuation Plans

5.7.3 Auditing Environmental Controls
- Water and Smoke Detectors
- Handheld Fire Extinguishers
- Fire Suppression Systems
- Regular Inspection by Fire Department
- Fireproof Walls, Floors and Ceilings of the Computer Room
- Electrical Surge Protectors
- Power Leads From Two Substations
- Fully Documented and Tested Business Continuity Plan
- Wiring Placed in Electrical Panels and Conduit
- UPS/Generator
- Documented and Tested Emergency Evacuation Plans
- Humidity/Temperature Control

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

### 5.8 Physical Access Exposures and Controls (S. 373)

5.8.1 Physical Access Issues and Exposures
- Physical Access Exposures
- Possible Perpetrators

5.8.2 Physical Access Controls
- Strategic Planning
- Access Controls
- Physical Surveys

5.8.3 Auditing Physical Access
- Access Controls
- Access Surveys
- Access Point Audits

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

### 5.9 Mobile Computing (S. 375)

- Alarm Control Panels
- Water Detectors
- Handheld Fire Extinguishers
- Manual Fire Alarms
- Fire Suppression Systems
- Strategically Locating the Computer Room
- Regular Inspection by Fire Department
- Fireproof Walls, Floors and Ceiling of the Computer Room
- Electrical Surge Protectors
- Uninterruptible Power Supply/Generator
- Emergency Power-off Switch
- Power Leads From Two Substations
- Wiring Placed in Electrical Panels and Conduit
- UPS/Generator
- Documented and Tested Emergency Evacuation Plans
- Fire-resistant Office Materials
- Documented and Tested Business Continuity Plan
- Wiring Placed in Electrical Panels and Conduit
- Inhibited Activities Within the IPF
- Fire-resistant Office Materials
- Documented and Tested Emergency Evacuation Plans
- Humidity/Temperature Control

<table>
<thead>
<tr>
<th>EQF-Kategorien</th>
<th>MD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenntnisse</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fertigkeiten</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kompetenz</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Über alle Kategorien</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>