# Project Management

Based on the Project Management book of knowledge

<table>
<thead>
<tr>
<th>Integration</th>
<th>Scope</th>
<th>Time/Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check parts of your plan are co-ordinated. Make trade off between competing objectives</td>
<td>Ensure the project includes all the work required and only the work required to complete the project</td>
<td>Ensure completion on time and on budget</td>
</tr>
<tr>
<td>Quality</td>
<td>Resources</td>
<td>Risk</td>
</tr>
<tr>
<td>Ensure project satisfies the needs for which it was undertaken</td>
<td>Make most effective use of human resources</td>
<td>Identify, analyse and respond to risks</td>
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</tbody>
</table>
# Integration Management

Check the parts of your plan are co-ordinated. Make trade off between competing objectives

<table>
<thead>
<tr>
<th>Plan development</th>
<th>Plan Execution</th>
<th>Overall Change Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inputs</td>
<td>Inputs</td>
<td>Inputs</td>
</tr>
<tr>
<td>Prior learning</td>
<td>Plan</td>
<td>Learning requests</td>
</tr>
<tr>
<td>CMMI guidelines</td>
<td>Tools</td>
<td>Plan change requests</td>
</tr>
<tr>
<td>Requirements</td>
<td>Status Review Reports</td>
<td>Additional Planning</td>
</tr>
<tr>
<td>QA</td>
<td>Outputs</td>
<td>Earned Value estimates</td>
</tr>
<tr>
<td>MS Project</td>
<td>Learning requests</td>
<td>Corrective action</td>
</tr>
<tr>
<td>DIA</td>
<td>Plan change suggestions</td>
<td>Learning</td>
</tr>
<tr>
<td>Outputs</td>
<td>Deliverables</td>
<td></td>
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<td>Deliverables</td>
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</tbody>
</table>
# Scope

Ensure project includes all the work required and only the work required to complete the project

<table>
<thead>
<tr>
<th>Initiation</th>
<th>Planning</th>
<th>Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Inputs</td>
<td>□ Inputs</td>
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</tr>
<tr>
<td>□ Product Description</td>
<td>□ Design scope</td>
<td>□ Work results</td>
</tr>
<tr>
<td>□ MS Project</td>
<td>□ Experience</td>
<td>□ Documentation</td>
</tr>
<tr>
<td>□ Tools</td>
<td>□ Tools</td>
<td>□ Tools</td>
</tr>
<tr>
<td>□ Set by course</td>
<td>□ Feasibility of design</td>
<td>□ Inspection</td>
</tr>
<tr>
<td>□ Expert judgement</td>
<td>□ Alternatives</td>
<td>□ Outputs</td>
</tr>
<tr>
<td>□ Outputs</td>
<td>□ Outputs</td>
<td>□ Outputs</td>
</tr>
<tr>
<td>□ Constraints/assumptions</td>
<td>□ Design scope</td>
<td>□ Formal acceptance in the format of design marks</td>
</tr>
</tbody>
</table>
Time/Cost
Ensure completion on time and on budget

Activity Definition/Sequencing/Duration
- Inputs
  - Work breakdown
  - Historical data
- Tools
  - Expert judgement
  - Templates
- Outputs
  - Activity List
  - Network Diagram
  - Duration estimates

Schedule Development
- Inputs
  - Tutorial Times
  - Study time
- Tools
  - MS Project
  - Duration compression
- Outputs
  - Schedule
  - Resource requirements

Schedule Control
- Inputs
  - Schedule
  - Status Review
  - Change requests
- Tools
  - Performance measurement
  - Additional planning
- Outputs
  - Lesson learnt
## Quality

Ensure project satisfies the needs for which it was undertaken

<table>
<thead>
<tr>
<th>Quality Planning</th>
<th>Quality Assurance</th>
<th>Quality Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Inputs</td>
<td>□ Inputs</td>
<td>□ Inputs</td>
</tr>
<tr>
<td>□ Design Scope</td>
<td>□ QA Plan</td>
<td>□ QA Plan</td>
</tr>
<tr>
<td>□ SEI Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Tools</td>
<td>□ Tools</td>
<td>□ Tools</td>
</tr>
<tr>
<td>□ Design of measures</td>
<td>□ Quality audits using QA.doc</td>
<td>□ Inspection</td>
</tr>
<tr>
<td>□ Outputs</td>
<td>□ Outputs</td>
<td>□ Sampling</td>
</tr>
<tr>
<td>□ QA Plan</td>
<td>□ QA Plan</td>
<td>□ Trend analysis</td>
</tr>
<tr>
<td>□ QA.doc</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Outputs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Change to design or QA.doc</td>
</tr>
</tbody>
</table>
Resources
Make most effective use of human resources

Organisational Planning
- Inputs
  - Staffing
- Tools
  - MS Project
- Outputs
  - Role assignment

Team Development
- Inputs
  - Project staff skills
  - Project Plan
- Tools
  - Training
- Outputs
  - Performance improvement in terms of marks
# Risk

## Identify, analyse and respond to risks

### Identify Risks
- **Inputs**
  - Product description
- **Tools**
  - Checklists based on sources of risk
  - Flowcharts to show cause and effect
  - Interviews with stakeholders (you)
- **Outputs**
  - Sources of risk
  - Potential risks
  - Symptoms of risk
  - Effect on other processes

### Quantification
- **Inputs**
  - Tolerances to risk occurrence
  - Sources or risk
- **Tools**
  - Probability of risk
  - Value of risk effect
- **Outputs**
  - Action/Inaction points

### Response Development
- **Inputs**
  - Action/inaction points
- **Tools**
  - Procurement
  - Contingency plan
- **Outputs**
  - Risk Management Plan
## Communication by Tutors

Ensure timely and appropriate generation and dissemination of project information

### Planning
- **Inputs**
  - Requirements

- **Tools**
  - Stakeholder needs

- **Outputs**
  - Communication management plan

### Distribution
- **Inputs**
  - Management Plan
  - Project Plan

- **Tools**
  - Communication skills
  - Web/email to course

- **Outputs**
  - Records

### Reporting
- **Inputs**
  - Project Plan

- **Tools**
  - Performance reviews
  - Variance analysis
  - Earned value analysis

- **Outputs**
  - Reports
  - Change requests