

Cyber Security Degree - Learner Journey V05 (see end of document for EPA Assessment Plan, and Module to KSB mapping)

Month	Month 1 (Year 1)	Months 1-2 (Year 1)	Months 2-3 (Year 1)	Months 3-4 (Year 1)
IT Training & Assessing	Onboarding (New / Transfers)	Training in College	Workplace Competency visit	Training in College
Teaching and Learning	<p>Skills Scan / Transfer Assessment & Onboarding (Preparation)</p> <p>Skills Scans (New Apprentices)</p> <p>Transfer Assessments (Transferring Apprentices)</p> <p>Enablement of access cards, GC & UWE logins</p> <p>Optional IT Fundamentals block - TBC</p>	<p>Operating Systems and Architecture (3 x 5 Day Blocks)</p> <p>Induction & Introductions</p> <p>Overview of Apprenticeship</p> <p>Overview of Learner Journey</p> <p>Additional Behaviours & PD Communication skills & team building built into curriculum and classroom activities</p>	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and Apprentice to complete Competency Tracker to:</p> <p>A) Understand competencies the apprentice believes they will, and will not be able to complete in their current role</p> <p>B) Agree job rotation with employer to expose apprentices to opportunities to gain real-world evidence for competencies identified</p> <p>C) Apprentice to seek opportunities for evidencing competencies and upload to Smart Assessor</p>	<p>Programming (3 x 5 Day Blocks)</p> <p>Additional Behaviours & PD Academic Writing Workshop Referencing Workshop Study and problem-solving skills embedded within the classroom activities.</p> <p>Alternative software development tools discussed and demonstrated.</p>
Assessment	<p>Initial / Baseline Assessment of Apprentice Knowledge</p> <p>Formative Assessment - Test on Core Cyber Security Terminology.</p>	<p>Formative Assessments completed In class via mini-tests via MS Forms, Recap Session Q&A and Individual or Group Practical Tasks</p> <p>Summative Assessments completed via 2 Assignments for completion individually, typically set during Block 1 & 3</p>	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	<p>Formative Assessments completed In class via mini-tests via MS Forms, Recap Session Q&A and Individual or Group Practical Tasks</p> <p>Summative Assessments completed via 2 Assignments for completion individually, typically set during Block 1 & 3</p>
Portfolio Evidence	<p>OTJ entry for 1st day on Smart Assessor, show apprentices how to upload / link evidence</p>	<p>In addition to delivering knowledge content, trainers will provide real world application of knowledge gained, which will also assist apprentice in identifying areas where competencies may be evidenced using "Real World" and "Naturally Occurring" industry scenarios</p>	<p>Progress assessed during visit</p>	<p>In addition to delivering knowledge content, trainers will provide real world application of knowledge gained, which will also assist apprentice in identifying areas where competencies may be evidenced using "Real World" and "Naturally Occurring" industry scenarios</p>
EPA Preparation	<p>Knowledge competencies within this block are assessed via Knowledge Test</p>	<p>Refer to Module Specification, Module Learning Outcomes for full details</p>	<p>Evidence for a portfolio and English skills will be developed ready for EPA.</p>	<p>Refer to Module Specification, Module Learning Outcomes for full details</p>
Employer tasks and application of knowledge learnt	<p>Review Cyber Security Degree standard and supporting documentation to gain a robust understanding of the support the apprentice will need to evidence the competencies throughout the course, as defined by the standard</p>	<p>Employer to utilise Competency / Portfolio Tracker document provided to identify what competencies can and cannot be achieved in current role, and for those not achievable create an action plan to resolve</p>	<p>Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities</p>	<p>Employer to utilise Competency / Portfolio Tracker document provided to monitor progress i.e. planned vs actual</p>
KSBs	N/A	<p>Refer to Module to KSB Mapping matrix at the end of this document for further details</p>	<p>All Knowledge, Skills & Behaviours</p>	<p>Refer to Module to KSB Mapping matrix at the end of this document for further details</p>
Progress reviews	<p>TC review every 6 weeks</p>	<p>TC Review</p>	<p>Ongoing Progress Monitoring</p>	<p>TC Review</p>

Month	Months 4-5 (Year 1)	Months 5-6 (Year 1)	Months 6-7 (Year 1)	Months 7-8 (Year 1)
IT Training & Assessing	Workplace Competency visit	Training in College	Workplace Competency visit	Training in College
Teaching and Learning	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and Apprentice to complete Competency Tracker to:</p> <ul style="list-style-type: none"> A) Understand competencies the apprentice believes they will, and will not be able to complete in their current role B) Agree job rotation with employer to expose apprentices to opportunities to gain real-world evidence for competencies identified C) Apprentice to seek opportunities for evidencing competencies and upload to Smart Assessor 	<p>Cyber Threats</p> <p>(3 x 5 Day Blocks)</p> <p>Additional Behaviours & PD</p> <p>Additional feedback given for presentation and individual soft skill development</p>	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <ul style="list-style-type: none"> A) Identify potential competency opportunities the apprentice could complete in their current role B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor D) Provide opportunity for 2-way feedback on progress through the degree 	<p>Networking</p> <p>(3 x 5 Day Blocks)</p>
Assessment	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	<p>Formative Assessments completed In class via mini-tests via MS Forms, Recap Session Q&A and Individual or Group Practical Tasks</p> <p>Summative Assessments completed via 2 Assignments for completion individually, typically set during Block 1 & 3</p>	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	<p>Formative Assessments completed In class via mini-tests via MS Forms, Recap Session Q&A and Individual or Group Practical Tasks</p> <p>Summative Assessments completed via 2 Assignments for completion individually, typically set during Block 1 & 3</p>
Portfolio Evidence	Progress assessed during visit	In addition to delivering knowledge content, trainers will provide real world application of knowledge gained, which will also assist apprentice in identifying areas where competencies may be evidenced using "Real World" and "Naturally Occurring" industry scenarios	Progress assessed during visit	In addition to delivering knowledge content, trainers will provide real world application of knowledge gained, which will also assist apprentice in identifying areas where competencies may be evidenced using "Real World" and "Naturally Occurring" industry scenarios
EPA Preparation	Evidence for a portfolio and English skills will be developed ready for EPA.	Refer to Module Specification, Module Learning Outcomes for full details	Evidence for a portfolio and English skills will be developed ready for EPA.	Refer to Module Specification, Module Learning Outcomes for full details
Employer tasks and application of knowledge learnt	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	Employer to utilise Competency / Portfolio Tracker document provided to monitor progress i.e. planned vs actual	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	Employer to utilise Competency / Portfolio Tracker document provided to monitor progress i.e. planned vs actual
KSBs	All Knowledge, Skills & Behaviours	Refer to Module to KSB Mapping matrix at the end of this document for further details	All Knowledge, Skills & Behaviours	Refer to Module to KSB Mapping matrix at the end of this document for further details
Progress reviews	Ongoing Progress Monitoring	TC Review	Ongoing Progress Monitoring	TC Review

Month	Months 8-9 (Year 1)	Months 9-10 (Year 1)	Months 10-11 (Year 1)	Months 11-12 (Year 1)
IT Training & Assessing	Workplace Competency visit	Knowledge & Skills in Workplace	Workplace Competency visit	Knowledge & Skills in Workplace
Teaching and Learning	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Apprentice applying & embedding KSB's in Workplace</p> <p>Apprentice continuing to:</p> <p>Build and enhance KSB's in the workplace</p> <p>Identify competency opportunities</p> <p>Create and collate evidence</p> <p>Upload evidence & OTJ to Smart Assessor</p>	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Apprentice applying & embedding KSB's in Workplace</p> <p>Apprentice continuing to:</p> <p>Build and enhance KSB's in the workplace</p> <p>Identify competency opportunities</p> <p>Create and collate evidence</p> <p>Upload evidence & OTJ to Smart Assessor</p>
Assessment	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	Progress assessed during next visit	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	Progress assessed during next visit
Portfolio Evidence	Progress assessed during visit	Progress assessed during next visit	Progress assessed during visit	Progress assessed during next visit
EPA preparation	Evidence for a portfolio and English skills will be developed ready for EPA.	Progress assessed during next visit	Evidence for a portfolio and English skills will be developed ready for EPA	Progress assessed during next visit
Employer tasks and application of knowledge learnt	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	Progress assessed during next visit	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	Progress assessed during next visit
KSBs	All Knowledge, Skills & Behaviours	All Knowledge, Skills & Behaviours	All Knowledge, Skills & Behaviours	All Knowledge, Skills & Behaviours
Progress reviews	Ongoing Progress Monitoring	Progress assessed during next visit	Ongoing Progress Monitoring	Progress assessed during next visit

Month	Months 12-13 (Year 2)	Months 13-14 (Year 2)	Months 14-15 (Year 2)	Months 15-16 (Year 2)
IT Training & Assessing	Workplace Competency visit	Training in College	Workplace Competency visit	Training in College
Teaching and Learning	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Cryptography, mathematics and algorithms</p> <p>(3 x 5 Day Blocks)</p> <p>Additional Behaviours & PD</p> <p>Technical Report and Critical writing skills workshop</p>	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Information management and security</p> <p>(3 x 5 Day Blocks)</p> <p>Additional Behaviours & PD</p> <p>Additional feedback given for presentation and individual soft skill development</p>
Assessment	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	<p>Formative Assessments completed In class via mini-tests via MS Forms, Recap Session Q&A and Individual or Group Practical Tasks</p> <p>Summative Assessments completed via 2 Assignments for completion individually, typically set during Block 1 & 3</p>	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	<p>Formative Assessments completed In class via mini-tests via MS Forms, Recap Session Q&A and Individual or Group Practical Tasks</p> <p>Summative Assessments completed via 2 Assignments for completion individually, typically set during Block 1 & 3</p>
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Progress reviews	Ongoing Progress Monitoring	TC Review	Ongoing Progress Monitoring	TC Review

Month	Months 16-17 (Year 2)	Months 17-18 (Year 2)	Months 18-19 (Year 2)	Months 19-20 (Year 2)
IT Training & Assessing	Workplace Competency visit	Training in College	Workplace Competency visit	Training in College
Teaching and Learning	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Operating system security and defensive programming</p> <p>(3 x 5 Day Blocks)</p> <p>Additional Behaviours & PD</p> <p>Problem Solving skills embedded into classroom activities</p>	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Embedded systems security</p> <p>(3 x 5 Day Blocks)</p>
Assessment	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	<p>Formative Assessments completed In class via mini-tests via MS Forms, Recap Session Q&A and Individual or Group Practical Tasks</p> <p>Summative Assessments completed via 2 Assignments for completion individually, typically set during Block 1 & 3</p>	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	<p>Formative Assessments completed In class via mini-tests via MS Forms, Recap Session Q&A and Individual or Group Practical Tasks</p> <p>Summative Assessments completed via 2 Assignments for completion individually, typically set during Block 1 & 3</p>
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Employer tasks and application of knowledge learnt	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	Employer to utilise Competency / Portfolio Tracker document provided to monitor progress i.e. planned vs actual	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	Employer to utilise Competency / Portfolio Tracker document provided to monitor progress i.e. planned vs actual
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Progress reviews	Ongoing Progress Monitoring	TC Review	Ongoing Progress Monitoring	TC Review

Month	Months 20-21 (Year 2)	Months 21-22 (Year 2)	Months 22-23 (Year 2)	Months 23-24 (Year 2)
IT Training & Assessing	Workplace Competency visit	Knowledge & Skills in Workplace	Workplace Competency visit	Knowledge & Skills in Workplace
Teaching and Learning	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Apprentice applying & embedding KSB's in Workplace</p> <p>Apprentice continuing to:</p> <p>Build and enhance KSB's in the workplace</p> <p>Identify competency opportunities</p> <p>Create and collate evidence</p> <p>Upload evidence & OTJ to Smart Assessor</p>	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Apprentice applying & embedding KSB's in Workplace</p> <p>Apprentice continuing to:</p> <p>Build and enhance KSB's in the workplace</p> <p>Identify competency opportunities</p> <p>Create and collate evidence</p> <p>Upload evidence & OTJ to Smart Assessor</p>
Assessment	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	Progress assessed during next visit	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	Progress assessed during next visit
Portfolio Evidence	Progress assessed during visit	Progress assessed during next visit	Progress assessed during visit	Progress assessed during next visit
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Employer tasks and application of knowledge learnt	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	Progress assessed during next visit	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	Progress assessed during next visit
KSBs	All Knowledge, Skills & Behaviours	All Knowledge, Skills & Behaviours	All Knowledge, Skills & Behaviours	All Knowledge, Skills & Behaviours
Progress reviews	Ongoing Progress Monitoring	Progress assessed during next visit	Ongoing Progress Monitoring	Progress assessed during next visit

Month	Months 24-25 (Year 3)	Months 25-26 (Year 3)	Months 26-27 (Year 3)	Months 27-28 (Year 3)
IT Training & Assessing	Workplace Competency visit	Training in College	Workplace Competency visit	Training in College
Teaching and Learning	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Security assurance and security case development</p> <p>(3 x 5 Day Blocks)</p> <p>Introduction and scope defined for Project and Dissertation</p>	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Risk and information management</p> <p>(3 x 5 Day Blocks)</p>
Assessment	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	<p>Formative Assessments completed In class via mini-tests via MS Forms, Recap Session Q&A and Individual or Group Practical Tasks</p> <p>Summative Assessments completed via 2 Assignments for completion individually, typically set during Block 1 & 3</p>	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	<p>Formative Assessments completed In class via mini-tests via MS Forms, Recap Session Q&A and Individual or Group Practical Tasks</p> <p>Summative Assessments completed via 2 Assignments for completion individually, typically set during Block 1 & 3</p>
Portfolio Evidence	Progress assessed during visit	In addition to delivering knowledge content, trainers will provide real world application of knowledge gained, which will also assist apprentice in identifying areas where competencies may be evidenced using "Real World" and "Naturally Occurring" industry scenarios	Progress assessed during visit	In addition to delivering knowledge content, trainers will provide real world application of knowledge gained, which will also assist apprentice in identifying areas where competencies may be evidenced using "Real World" and "Naturally Occurring" industry scenarios
EPA Preparation	Evidence for a portfolio and English skills will be developed ready for EPA.	Refer to Module Specification, Module Learning Outcomes for full details	Evidence for a portfolio and English skills will be developed ready for EPA.	Refer to Module Specification, Module Learning Outcomes for full details
Employer tasks and application of knowledge learnt	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	Employer to utilise Competency / Portfolio Tracker document provided to monitor progress i.e. planned vs actual	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	Employer to utilise Competency / Portfolio Tracker document provided to monitor progress i.e. planned vs actual
KSBs	All Knowledge, Skills & Behaviours	Refer to Module to KSB Mapping matrix at the end of this document for further details	All Knowledge, Skills & Behaviours	Refer to Module to KSB Mapping matrix at the end of this document for further details
Progress reviews	Ongoing Progress Monitoring	TC Review	Ongoing Progress Monitoring	TC Review

Month	Months 28-29 (Year 3)	Months 29-30 (Year 3)	Months 30-31 (Year 3)	Months 31-32 (Year 3)
IT Training & Assessing	Workplace Competency visit	Training in College	Workplace Competency visit	Project Report
Teaching and Learning	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Cyber security incident management and professionalism</p> <p>(3 x 5 Day Blocks)</p>	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Project and Dissertation Submission</p> <p>(Submission)</p>
Assessment	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	<p>Formative Assessments completed In class via mini-tests via MS Forms, Recap Session Q&A and Individual or Group Practical Tasks</p> <p>Summative Assessments completed via 2 Assignments for completion individually, typically set during Block 1 & 3</p>	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	N/A
Portfolio Evidence	Progress assessed during visit	In addition to delivering knowledge content, trainers will provide real world application of knowledge gained, which will also assist apprentice in identifying areas where competencies may be evidenced using "Real World" and "Naturally Occurring" industry scenarios	Progress assessed during visit	N/A
EPA Preparation	Evidence for a portfolio and English skills will be developed ready for EPA.	Refer to Module Specification, Module Learning Outcomes for full details	Evidence for a portfolio and English skills will be developed ready for EPA.	N/A
Employer tasks and application of knowledge learnt	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	Employer to utilise Competency / Portfolio Tracker document provided to monitor progress i.e. planned vs actual	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	N/A
KSBs	All Knowledge, Skills & Behaviours	Refer to Module to KSB Mapping matrix at the end of this document for further details	All Knowledge, Skills & Behaviours	N/A
Progress reviews	Ongoing Progress Monitoring	TC Review	Ongoing Progress Monitoring	TC Review

Month	Months 32-33 (Year 3)	Months 33-34 (Year 3)	Months 34-35 (Year 3)	Months 35-36 (Year 3)
IT Training & Assessing	Workplace Competency visit	Project Report	Workplace Competency visit	Knowledge & Skills in Workplace
Teaching and Learning	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Project and Dissertation Viva</p> <p>(Viva and Demonstration)</p>	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Apprentice applying & embedding KSB's in Workplace</p> <p>Apprentice continuing to:</p> <p>Build and enhance KSB's in the workplace</p> <p>Identify competency opportunities</p> <p>Create and collate evidence</p> <p>Upload evidence & OTJ to Smart Assessor</p>
Assessment	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	N/A	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	Progress assessed during next visit
Portfolio Evidence	Progress assessed during visit	N/A	Progress assessed during visit	Progress assessed during next visit
EPA Preparation	Evidence for a portfolio and English skills will be developed ready for EPA.	N/A	Evidence for a portfolio and English skills will be developed ready for EPA.	Progress assessed during next visit
Employer tasks and application of knowledge learnt	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	N/A	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	Progress assessed during next visit
KSBs	All Knowledge, Skills & Behaviours	N/A	All Knowledge, Skills & Behaviours	All Knowledge, Skills & Behaviours
Progress reviews	Ongoing Progress Monitoring	TC Review	Ongoing Progress Monitoring	Progress assessed during next visit

Month	Months 36-37 (Year 4)	Months 37-38 (Year 4)	Months 38-39 (Year 4)	Months 39-40 (Year 4)
IT Training & Assessing	Workplace Competency visit	EPA Preparation	Workplace Competency visit	EPA Preparation
Teaching and Learning	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Apprentice collating EPA evidence for review</p> <p>(Evidence Collation & Review)</p>	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Apprentice collating EPA evidence for review</p> <p>(Evidence Collation & Review)</p>
Assessment	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	Trainer & Assessor to provide feedback to apprentice via Smart Assessor	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	Trainer & Assessor to provide feedback to apprentice via Smart Assessor
Portfolio Evidence	Progress assessed during visit	Evidence Gathering	Progress assessed during visit	Evidence Gathering
EPA Preparation	Evidence for a portfolio and English skills will be developed ready for EPA.	N/A	Evidence for a portfolio and English skills will be developed ready for EPA.	N/A
Employer tasks and application of knowledge learnt	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	N/A	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	N/A
KSBs	All Knowledge, Skills & Behaviours	N/A	All Knowledge, Skills & Behaviours	N/A
Progress reviews	Ongoing Progress Monitoring	TC Review	Ongoing Progress Monitoring	TC Review

Month	Months 40-41 (Year 4)	Months 41-42 (Year 4)	Months 42-43 (Year 4)	Months 43-44 (Year 4)
IT Training & Assessing	Workplace Competency visit	EPA Preparation	Workplace Competency visit	Gateway Entry & EPA Period START
Teaching and Learning	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Apprentice collating EPA evidence for review (Evidence Collation & Review)</p>	<p>Apprentice Visit (via MS Teams or Workplace)</p> <p>Trainer & Assessor to work with Employer and/or Apprentice to complete Competency Tracker to:</p> <p>A) Identify potential competency opportunities the apprentice could complete in their current role</p> <p>B) Ensure evidence (draft or final) is uploaded to Smart Assessor for Assessor review and feedback</p> <p>C) Ensure OTJ Hours are provided by employer, used by apprentice, and logged on Smart Assessor</p> <p>D) Provide opportunity for 2-way feedback on progress through the degree</p>	<p>Apprentice to submit all documentation for final review in order to enter Gateway and start EPA (Submission)</p> <p>The Gateway requirements are :</p> <ol style="list-style-type: none"> the employer confirms that the apprentice is ready for the EPA and has met the knowledge, skills and behaviour requirements set out in the occupational standard; and the apprentice has completed and passed all the modules in the BSc Cyber Security Technical Professional degree, other than the end point assessment which contributes 10 credits; and the apprentice has passed Level 2 English and maths (if not already achieved); and the apprentice has produced a portfolio in relation to the KSBs for the Technical Discussion (see tables 1, 2, 3 and 4 below).
Assessment	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor</p>	<p>Trainer & Assessor to provide feedback to apprentice via Smart Assessor regarding last visit, and set new tasks and targets</p> <p>Trainer & Assessor to ensure evidence presented meets the expected level of competence</p> <p>Actions, Deadlines and Plans set at end of meeting</p>	<p>Checklist completed to ensure all elements have been met for gateway against the correct standards on IFAT including portfolio requirements (this must be checked)</p>
Portfolio Evidence	Progress assessed during visit	Evidence Gathering	Progress assessed during visit	Completed Portfolio Quality Checked to include between six and eight real work projects/pieces of work.
EPA Preparation	Evidence for a portfolio and English skills will be developed ready for EPA.	N/A	Evidence for a portfolio and English skills will be developed ready for EPA.	<p>Discuss with employer & apprentice EPA requirements including practical tests and technical discussions underpinned by portfolio details on IFAT.</p> <p>All paperwork signed and completed</p>
Employer tasks and application of knowledge learnt	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	N/A	Employer to ensure that the apprentice has protected OTJ hours and is on track with training plan, which can be amended / enhanced in line with business needs and opportunities	Employer to ensure that the apprentice has protected OTJ for EPA assessed tasks and per/stakeholder and employer references are completed
KSBs	All Knowledge, Skills & Behaviours	N/A	All Knowledge, Skills & Behaviours	All Knowledge, Skills & Behaviours
Progress reviews	Ongoing Progress Monitoring	TC Review	Ongoing Progress Monitoring	Meeting arranged with all parties

Month	Months 44-45 (Year 4)	Months 45-46 (Year 4)	Months 46-47 (Year 4)	Months 47-48 (Year 4)
IT Training & Assessing	EPA Period ASSESSMENTS	EPA Period ASSESSMENTS	EPA Period END	EPA Result
Teaching and Learning	Apprentice Assessments (Assessment) Practical Tests Technical Discussion underpinned by Portfolio	Apprentice Assessments (Assessment) Practical Tests Technical Discussion underpinned by Portfolio	Apprentice to submit all documentation for final review in order to enter Gateway and start EPA (Submission)	Collation of all assessments findings for EPA Result (Results)
Assessment	1) Apprentices undertake a Practical Test which consists of four exercises to be assessed against the defined set of KSBs (as set out in Tables 1, 2, 3 and 4 below)The Practical Test is undertaken in a controlled environment 2) Technical Discussion underpinned by Portfolio	1) Apprentices undertake a Practical Test which consists of four exercises to be assessed against the defined set of KSBs (as set out in Tables 1, 2, 3 and 4 below) The Practical Test is undertaken in a controlled environment 2) Technical Discussion underpinned by Portfolio	N/A	N/A
Portfolio Evidence	N/A	N/A	N/A	N/A
EPA Preparation	Apprentices to conduct assessments	Apprentices to conduct assessments	N/A	N/A
Employer tasks and application of knowledge learnt	Provide off the job protected hours for learners to conduct EPA assessments	Provide off the job protected hours for learners to conduct EPA assessments	N/A	N/A
KSBs	N/A	N/A	N/A	N/A
Progress reviews	N/A	N/A	N/A	N/A

Cyber Security Degree “End Point Assessment Plan” (extract from IFATE Standard ST0409)

SECTION ONE: THE END-POINT ASSESSMENT GATEWAY

The EPA should only start once the Gateway requirements have been met and can be evidenced to the EPAO.

The Gateway requirements are that:

1. the employer confirms that the apprentice is ready for the EPA and has met the knowledge, skills and behaviour requirements set out in the occupational standard; and
2. the apprentice has completed and passed all the modules in the BSc Cyber Security Technical Professional degree, other than the end point assessment which contributes 10 credits; and
3. the apprentice has passed Level 2 English and maths (if not already achieved); and
4. the apprentice has produced a portfolio in relation to the KSBs for the Technical Discussion (see tables 1, 2, 3 and 4 below).

Portfolio requirements

The portfolio presents evidence from real-work projects and is used to help the apprentice answer questions in the Technical Discussion.

The portfolio will be created pre-Gateway and before EPA starts and is not assessed as part of the EPA. It contains evidence from projects that have been completed, usually, towards the end of the apprenticeship.

The portfolio is not marked as part of the EPA, but it does provide evidence that the Independent Assessor can use to probe further at the Technical Discussion.

Employers, with support from the HEI (as the apprenticeship delivery organisation), will assist the apprentice to assemble their portfolio.

The KSBs that are covered by the portfolio are as for Technical Discussion in tables 1, 2, 3 and 4.

The portfolio must be an e-portfolio presented digitally or online. It must include:

- a list of contents and a map of contents against the KSBs for the Technical Discussion as in tables 1, 2, 3 and 4; and
- a brief introduction/commentary by the apprentice, produced towards the end of their apprenticeship and highlighting, where appropriate, anything they would do differently; and
- evidence (see below) from between six and eight real work projects/pieces of work; and
- a testimonial from the employer, relating to the behavior shown in table 4; and
- written feedback from peers, colleagues and stakeholders; and
- demonstration of the business impact achieved during the apprenticeship; and
- evidence of teamworking; and
- a signed statement from the employer and HEI confirming this as being the apprentice's own work and confirming that, in their view, the work demonstrates the required KSBs as set out in tables 1, 2, 3 and 4 for the Technical Discussion; and
- a signed statement from the apprentice confirming this as her/his own work.

The portfolio may not include reflective accounts or self-evaluations.

The evidence referred to above can be submitted in a variety of appropriate and authentic formats, including:

- text, graphics, presentations, spreadsheets, project plans
- the product itself (such as a piece of code)
- job sheets, case studies, screen dumps, links
- photographs
- audio
- video
- written feedback

In terms of the employer testimonial referred to above (which is part of the portfolio), EPAOs should develop a template and/or guidance for employers to ensure the latter understand what EPAOs are looking for in a good portfolio.

The apprentice must provide the portfolio to the EPAO in at least one week before the commencement of the Technical Discussion.

Overview of End-Point Assessment Methods

Assessment Method	Areas Assessed	Assessed By	Grading
Practical Test	Apprentices undertake a Practical Test which consists of four exercises to be assessed against the defined set of KSBs (as set out in Tables 1, 2, 3 and 4 below) The Practical Test is undertaken in a controlled environment	Independent Assessor from an EPAO from the Register of End-Point Assessment Organisations	Fail Pass Merit Distinction
Technical Discussion	Apprentices undertake a Technical Discussion which is assessed against the defined set of KSBs (as set out in Tables 1, 2, 3 and 4 below)	The same Independent Assessor as above	Fail / Pass only

Cyber Security Degree Module to KSB mapping (Part/Fully Met)

Apprenticeship Knowledge (Technical Competencies, and Technical Knowledge and Understanding)	UJCFU-30-1 Cyber Threats	UJCFDU-30-1 Networking	UJFCU-30-1 OS & Architecture	UJCFEU-30-1 Programming	UJFCGU-30-2 Cryptography	UJCFJU-30-2 Embed. Sys. Security	UJCFKU-30-2 Info. Mgmt. & Security	UJCFHU-30-2 OS Security & Def. Prog.	UJCFNU-20-3 Cyber Sec. Incident Mgmt.	UJCFBU-10-3 End Point Assessment	UJCFPU-30-3 Project & Dissertation	UJCFMU-30-3 Risk & Info. Mgmt.	UJCFLU-30-3 Security Assurance
1: N/A Foundations of cyber security, its significance, concepts, threats, vulnerabilities and assurance.	F						P		P	P	P	P	P
2: Design, build, configure, optimise, test and troubleshoot simple and complex networks. Network foundations, connections, internetworking, protocols, standards, performance, security and server virtualisation.		F				P		P	P	P	P		
3: Apply statistical techniques to large data sets. Identify vulnerabilities in big data architectures and deployment. Information management, big data concepts, statistical techniques, database concepts and data quality.							F			P	P		
4: Build test and debug a digital system to a specification. Computer architecture, digital logic, machine level representation of data.			P	P						P	P		
5: Configure an Operating System in accordance with security policy. Identify threats and features. Operating System principles, architectures, features, mechanisms, security features and exploits.	P	P	F					F		P	P		P
6: Write, test, debug programs in high and low level languages and scripts.			p	F						P	P		

Algorithm and program design, concepts, compilers and logic. Programming languages.													
7: Design, implement and analyse algorithms. Algorithms, complexity and discrete maths.				P	F					P	P		
8: Construct software to interact with the real world and analyse for security exploits. How software interacts with the hardware and real world environment and security issues.						F			P	P	P		p
9: Analyse malware & identify its mechanisms. Malware, reverse engineering, obfuscation.						F			P	P	P		
10: Apply secure programming principles and design patterns to address security issues. Defensive programming, malware resistance, code analysis, formal methods, good practice.	P			P				F		P	P		P
11: Apply system engineering and software development methodologies and models. System development principles, tools, approaches, complexity, software engineering.				F				P		P	P		
12: Discover, identify and analyse threats, attack techniques, vulnerabilities and mitigations. Threats, vulnerabilities, impacts and mitigations in ICT systems and the enterprise environment.	P				P			P	P	P	P		P
13: Assess culture & individual responsibilities. Human dimensions of cyber security.	P						P		P	P	P	F	
14: Undertake ethical system reconnaissance and intelligence analysis. Structured and ethical intelligence analysis, methods, techniques.										P	P		F

15: Undertake risk modelling, analysis and trades. Management of cyber security risk, tools and techniques.	P									P	P	F	
16: Undertake risk assessment to an external standard. Quantitative & qualitative risk management theory & practice, role of risk stakeholders.										P	P	F	P
17: Apply a management system and develop an information security management plan. Concepts & benefits of security management systems, governance & international standards.							P			P	P	P	P
18: Configure and use security technology components and key management. Security components: how they are used for security / business benefit. Crypto & key management.					F					P	P		
19: Design & evaluate a system to a security case. How to compose a justified security case.									F	P	P		F
20: Architect, analyse & justify a secure system. Understand security assurance, how to achieve it and how to apply security principles								P		P	P		F
21: Develop an assurance strategy. Assurance concepts & approaches.										P	P		F
22: Security monitoring, analysis and intrusion detection. Recognise anomalies & behaviours. How to diagnose cause from observables. Application of SIEM (Security Information and Event Management) tools & techniques.		P								P	P	P	
23: Manage intrusion response, including with 3rd parties. Cyber incident response, management, escalation, investigation & 3rd party involvement.										F	P	P	

24: N/A Legal, regulatory, compliance & standards environment.										P	P	P	P	F
25: Organise testing & investigation work in accordance with legal & ethical requirements. Applicability of laws regulations & ethical standards.										P	P	P	P	P
26: Develop & apply information security policy to implement legal or regulatory requirements. Legal responsibilities of system owners, users, employers, employees.	P								P		P	P	P	P
Apprenticeship Skills														
	UFCFFU-30-1 Cyber Threats	UFCFDU-30-1 Networking	UFCFCU-30-1 OS & Architecture	UFCFEU-30-1 Programming	UFCFGU-30-2 Cryptography	UFCFJU-30-2 Embed. Sys. Security	UFCFKU-30-2 Info. Mgmt. & Security	UFCFHU-30-2 OS Security & Def. Prog.	UFCFNU-20-3 Cyber Sec. Incident Mgmt.	UFCFBU-10-3 End Point Assessment	UFCFPU-30-3 Project & Dissertation	UFCFMU-30-3 Risk & Info. Mgmt.	UFCFLU-30-3 Security Assurance	
Fluent in written communications and able to articulate complex issues.	F	F	F	F	F	F	F	F	F			F	F	
Makes concise, engaging and well-structured verbal presentations, arguments and explanations.	F	F	F	F	F	F	F	F	F			F	F	
Able to identify the preferences, motivations, strengths and limitations of other people and apply these insights to work more effectively with and to motivate others.	F	F	F	F	F	F	F	F	F			F	F	
Able to work effectively with others to achieve a common goal.	F	F	F	F	F	F	F	F	F			F	F	
Competent in active listening and in leading, influencing and persuading others.	F	F	F	F	F	F	F	F	F			F	F	

