South East Local Enterprise Partnership
Skills Capital Fund 2016-17
Specialist Equipment Application Form

Form A: Specialist Equipment Only

Section A1: Applicant Contact Information	
Name of Lead Applicant Organisation:	Harlow College
Lead Applicant Address:	Velizy Avenue Harlow Essex CM20 3LH
Contact Name and Job Title:	Karen Spencer Principal
Contact Telephone:	01279 868049
Contact Email:	kspencer@harlow-college.ac.uk
Partner Organisations:	For projects submitted by a lead organisation on behalf of a number of associated partner organisations N/A
UPIN (where applicable): Lead Other Applicants	105486

Section A2: Project Details	
Employment and Skills Board Endorsement	**Which area will you require endorsement from?** (Kent, Essex or East Sussex) Essex
Title of Project:	Harlow Advanced Manufacturing and Engineering Centre
Project Summary:	**Provide a brief summary of the project.** *maximum 300 words*

	The Harlow Advanced Manufacturing and Engineering Centre is a state of the art facility dedicated: • to developing aspiring young engineers and operations/maintenance engineers with hands-on experience and real cutting-edge technical skills; • to provide upskilling, reskilling and professional development for those in employment. It provides over 2,000m^2 of new engineering facilities including CNC, assembly and robotics, fabrication maintenance and PLC training, product design and development, metrology lab, electrical and mechanical services, fibre optic and CAD/CADCAM/IT teaching spaces. The VAT rebate enables investment in areas of HAMEC that were value engineered out of the original project, including sliding head technology with full scale bar feeds that will add another dimension to the computer numerical control skills being learnt by students. The College is in discussion with employers in relation to advanced 3D printing/laser technology as well as water jet cutting machinery. The College's intention for HAMEC is to keep abreast with new and emerging technologies, which in turn require additional ongoing investment, particularly in mobile devices. This will align to current industry practice where devices are being used to monitor production, improve business processes and in some cases simulate hazardous situations. This will add significant value to HAMEC, allowing it to increase the offer of vocational training in new qualifications and experiences to develop a more highly skilled, value added engineering base of aspiring young engineers. This will enable the development higher level skills with hands on experience in the use of real cutting-edge technologies. HAMEC has strong industrial collaboration through an Advisory Panel of over 40 manufacturing employers including Truck-Lite, Smith's Harlow, Harlow Group, Manchester Airport Group (representing engineering employers at Stansted Airport), Carrick, E2V and BTL Precision. The Advisory Panel and Manufacturing Technology Centre, Coventry has recommended the models listed in this application as equipment in current use in industry.
Total Project Cost:	£485,230
Grant Requested: If Grant requested is more than £150,000 a financial case will be required. (See Annex B of the guidance document)	£234,815 48% of total project costs
Location of Project:	Harlow College, Velizy Avenue, Harlow, Essex, CM20 3LH

Section A3: Specialist Equipment to be Purchased and Grant Requested

Reminder: SELEP requires proof of all purchased equipment costs. Where equipment includes an element donated by third parties as part of the applicant's match funding, we also require evidence of the value attributed to this equipment. SELEP is unable to pay capital grant for items where there is no appropriate proof of the cost. If your organisation can reclaim the VAT on the equipment, do not include this in your claim.

Description – including name and model of the equipment (The final item may be a different model as long as it provides the same or better function)	**Quantity (a)**	**Item Cost, including VAT if applicable (b) £**	**Total Cost including VAT if applicable (c)** (c = a x b) **£**
[redacted] CNC sliding head machine with full sized bar feed	1	[redacted]	[redacted]
[redacted] Site Licence software	1	[redacted]	[redacted]
Full sized bar feed to feed the [redacted] eco-turn	1	[redacted]	[redacted]
Industrial 3D Printer	1	[redacted]	[redacted]
Water Jet Cutting Machine	1	[redacted]	[redacted]
F1 Project / School engagement workshop – for breakdown please see **Annex 1**	Equip workshop	[redacted]	[redacted]
Mobile Devices	Equip workshop	[redacted]	[redacted]
d - Total Purchase Price of all equipment (sum of c)			£485,230
e - Total Grant support @ 50% (e = d x 50%)			£234,815
Match funding offered			£250,415

Section A4: Qualifying Statements

Please **DO NOT** remove criteria or headings from the form as this makes it difficult for those assessing the bids.

Need for Investment:	**Explain the key drivers for the project and how the project relates to LEP/government priorities.** Outline what the project intends to achieve. Make it clear how the project links to the case for benefits to learners and economic growth (see section 4). (*maximum 500 words. This will not be scored but enables assessment panel to understand the bid)* Harlow College received £2.5m Local Growth Funding through the first round of skills capital funding (2015-17) towards the total HAMEC project costs of £7.5m, of which Essex County Council contributed £2m. The centre is built, running and exceeding targets. With the involvement of employers and the increase in opportunities, the College has seen growth in both full-time and apprentices following a manufacturing route. I In December 2017, HMRC advised Harlow College that the project's construction phase was VAT refundable based on HAMEC's current

	usage. This arose from the decision of Governors of Harlow College to examine whether the College could reclaim VAT paid on several capital building programmes that had taken place on the campus since 2001. HMRC's judgement that the purpose of HAMEC is currently predominantly non-business focused resulted in a VAT release on spend of £1,022,667. The College is able to utilise this VAT rebate to add value and additionality to HAMEC (£485,230). The College will use its proportion on the VAT rebate (£600,000) to meet budget challenges in the Stansted Airport College project, thereby meeting the SELEP Skills Strategy and Essex Employment and Skills Board (ESB) priorities. Advanced Manufacturing and Engineering, identified as a priority area for growth by the Essex ESB, accounts for the employment of nearly 40,000 people across Essex in over 4,000 companies. Local and regional advanced manufacturing employers must recruit 13,500 more engineers to fill emerging roles and those vacated by an imminently retiring workforce. Engineering and manufacturing employers report difficulties in recruiting people, regionally and nationally, into jobs with technical skills from entry level to highly skilled occupations. In HAMEC, we will create the best environment, unrivalled in the M11 Corridor and Essex, in which we can develop and train the workforces of the future. The project: • enables Harlow College to develop innovative approaches to teaching, learning and assessment making engineering courses more attractive, enhance student engagement, improve retention and raise learner outcomes. • supports HAMEC as a centre for ambition and achievement for learners and employers, developing skills and confidence in areas that underpin high-value manufacturing, such as intelligent automation, robotics, metrology, mechatronics and CAD/CAM creating a stronger talent pipeline in this priority sector to take up employment and Apprenticeships/Higher Apprenticeships • increases the offer of vocational training in new and higher level qualifications to develop a highly skilled, value-added engineering base of young engineers with hands on experience with cutting-edge technologies. It offers more flexible routes and opportunities to higher education by improving vocational pathways to higher skill levels and professional qualifications, supporting learners on the Higher Apprenticeship in Advanced Manufacturing Engineering and HNC/HND in engineering and manufacturing qualifications. • enables students/apprentices and schools to participate in substantial, challenging employer-led projects that enhance education by coupling classroom knowledge with practical experience involving real engineering design, analysis, test, fabrication, integration and operation. • offers work readiness programmes, including employability and

	functional skills, with enrolment opportunities across the year to support unemployed adults, people who have become remote from the workplace and NEETS to become employable.
Use of equipment.	**Provide a short, simple and non-technical description explaining the specialist nature of the equipment required.** *(maximum 500 words. This will not be scored but enables assessment panel to understand the bid)* The grant funding will enable Harlow College students, adult learners and partner schools to work on leading-edge technology to learn innovative engineering concepts with equipment that will replicate the workplace. Our learners will develop skills to set, programme and operate the technology to be better able to respond to employer needs and priorities. The equipment to be purchased will fulfil the requirements of the latest industry-standards that would be found across a broad range of advanced manufacturing workplaces. The College will purchase the following equipment: A [redacted] **Sliding Head Machine** with full sized bar feed – this allows learners the opportunity to learn an alternative machining language and a method used for small piece production. [redacted] **Site Licence** will allow learners to work on real prototype developments for employers. A [redacted] bar feed for the [redacted] will extend the capabilities of the machine to batch work. An industrial **Objet 3D printer** would also benefit the learners working on prototyping. A [redacted] **Water Jet Cutting Machine** would add the ability to machine sheet materials such as stainless, plastics and even wood. The **F1 (Formula 1) Project/School Link Workshop** would allow our learners to develop and practice the skills required for the use of the industrial machines. It would also then become a manufacturing centre for schools. The F1 project runs local, regional and national competitions which cover school age through to learners studying at levels 4 and 5. This investment would make us the only manufacturing test centre within our region and will add value to the work of the HAMEC and will develop an interest in engineering in young people. The Workshop will include: QuickCAM Air Trace visualisation system F1 Race System Package Car Deceleration System F1 Race Track Flight Case F1 Race Control System Flight Case

	Denford Race CO2 Power Packs Compact 1000 PRO Quick Change Toolholders, Collet and Tooling Package Universal Machine Bench with computer support extension Floating Head for Compact 1000 Pro Dust Pro 50 Extraction Unit F1 in Schools Car Manufacturing Fixture 4th Axis F1 in Schools Car Manufacturing Conversion Kit 4th Axis Programmable Rotary Fixture including Quick CAM 4D Site Licence Vertical Milling Machine Universal Machine Bench Option - Integrated Dust Pro 100 Extraction Unit F1 Model Pack Equipping the HAMEC workshops with mobile devices [redacted] would enable learners the ability to access and store production engineering data as well as on-line maintenance manuals aligning processes to that of standard industry practice. This will help in the transition from college to the workplace.
Benefits to Learners Please fully address the criteria in each section. Do not rely on evidence elsewhere in the document to show how you will meet the criteria.	**Tackling those not in employment, education or training (NEETs) and unemployment (if relevant):** Explain how the project will have a positive and measurable impact on tackling: • 16-24 unemployment • adult unemployment • NEETs HAMEC will support young people, NEETS, unemployed adults and those seeking to return to work in their transition to employment by increasing their employability, by providing better information, advice, guidance and giving greater exposure to the world of work. We will do this by: • Special return to work programmes that tackle low skills and improve employability skills, literacy and numeracy; address poor attitudes to work, develop motivation and focus on the work-readiness of our learners. • Improving the scale and quality of impartial IAG provision for young people and adults, develop job search skills, raise interview performance, personal presentation skills. • Increasing employment options to combat high levels of unemployment amongst 16-24 year olds including Apprenticeships and Traineeships • Supporting employers with better recruitment processes through the Industry Advisory Panel. • Improve the opportunities and skills of the unemployed, helping the long term and young unemployed back into work with a range of support measures.

	Harlow College has a good reputation for widening participation for learners with learning difficulties and disabilities to ensure equality of access to its courses. HAMEC will offer new opportunities for more learners at Level 1 that best suit their abilities and career aspirations. The Level 1 programmes will focus on basic engineering skills and employability skills. We will work with employers to develop more opportunities for work experience and traineeships. (*Maximum 250 words, max score 6)*
	Expanding and growing Apprenticeships: Explain how the project will support the expansion and growth of Apprenticeships, particularly in LEP priority sectors, with particular reference to: • how the project will have a positive and measurable impact on increasing and expanding 16-18 and 19-24 Apprenticeships • how the project will support the provision of enhanced progression routes to higher-level training, including higher-level Apprenticeships This additional development of HAMEC will expand delivery of Apprenticeships in priority growth sectors and industries. By broadening the equipment that our learners can access, we will develop their skills across a wider range of technologies and make them more employable across a growing number of advanced manufacturing and engineering disciplines. Additionally, HAMEC will place a strong focus on promoting design and engineering to schools, showcasing the technology and career opportunities to a younger group of people. We will do this by developing aspiring school outreach programmes in design and product development. Our F1 dedicated workshop will enthuse and grow our young engineers of the future, by transforming perceptions of the Manufacturing and Engineering sector. Apprentices studying at HAMEC will benefit from the increased opportunity to develop their skills on industry standard and cutting-edge equipment that this project brings in the accessible and supportive learning environment, with staff able to support and develop their learning. This will support, retain and grow Apprenticeships and Higher Apprenticeships. What is of critical importance is the ongoing engagement of employers, through meeting their skill needs, who will then offer to employ more Apprentices and offer permanent employment on completion of the Apprenticeship. Harlow College is in the process of developing clear routes from level 3 programmes and Apprenticeships to higher-level training including Higher Apprenticeships at Level 4/5. Furthermore, the College has

	developed progression routes into qualifications at Level 4/5 in HND/HNC Engineering delivered at HAMEC and is proposing to introduce HND/HNC in Engineered Housing. *(maximum 250 words, max score 6)*
	Increasing employer engagement: Explain how the project will meet the needs of employers and provide them a greater role in shaping delivery, including: • how the project will support the business and skills requirements of employers, particularly small- and medium-sized enterprises (SMEs). • How employers will be given an on-going role in co-production of the curriculum and steering delivery of provision Essex ESB identifies Advanced Manufacturing and Engineering as a priority area for growth. It accounts for the employment of nearly 40,000 people across Essex in over 4,000 companies, meaning that most local manufacturing and engineering businesses are SMEs. Local and regional advanced manufacturing employers must recruit 13,500 more engineers to fill emerging roles and those vacated by an imminently retiring workforce. Engineering and manufacturing employers report difficulties in recruiting people, regionally and nationally, into jobs with technical skills from entry level to highly skilled occupations. HAMEC has established an Advisory Panel, comprising leading local advanced manufacturing employers, to ensure strong employer engagement in the design and delivery of the curriculum. The project will develop, annually, three significant employer-led projects to ensure the quality and industry relevance of provision. Students will help employers test early stage manufacturing and materials concepts and prove their solutions using the latest manufacturing and materials technologies and digital technologies to increase productivity, systems flexibility and resource efficiency. By working collaboratively to harness the assets, resources and expertise of employers in the design and equipping of HAMEC and its curriculum, Harlow College is investing in an infrastructure that will deliver skills required now and in the future. This will create education and training that satisfies the aspirations of learners whilst delivering the high-calibre engineers and technicians that businesses need. HAMEC's Advisory Panel of over 40 engineering employers includes Stansted Airport, Hexagon, Smith's Harlow, Harlow Group, Jemtech, Carrick, Grantells and BTL Precision. *(maximum 250 words, max score 6)*
	Providing benefits to classroom-based learners: Explain how the project will provide benefits to classroom-based learners, including: • a positive and measurable impact on 16-18 learners

	• a positive and measurable impact on adult learners • a flexible resource base and industry-standard equipment and environments for vocational learning. The project will: • Inspire and enthuse a wider group of young people into seeking a career within the engineering sector. • Significantly increase the number of learners with higher-level technical skills, crucial to national, regional and local productivity growth; • Improve the occupational competency of learners to meet the needs of employers now and in the future. The project will increase the participation of young people in work, education and training by focusing on advanced manufacturing and engineering, addressing the demand for qualified workers and Apprentices enabling them to begin and sustain successful career pathways. They will gain advanced skills, develop multi-skills, improve existing skills and benefit from professional development to sustain employment in modern manufacturing and engineering environments. In addition to existing HAMEC growth targets, we will engage with 10 local schools and deliver programmes to enthuse and inspire pre-16 learners. All learners will benefit from HAMEC's industry standard technical equipment in a purpose built environment that replicates the workplace to support Advanced Manufacturing and Engineering technologies. The equipment has been selected on the recommendation of HAMEC's Advisory Panel and the Manufacturing Technology Centre, Coventry. The project enables our learners to prepare for a world that is changing rapidly and will improve skills in preparation for the world of work. This includes improving our provision with technical and digital technology skills, thereby equipping learners with the skills and resilience to make an effective transition from College to work in order that they can be successful and contribute productively to the economy. (*maximum 250 words, max score 6)*
	Improving the quality (in particular success and retention rates) and the relevance of provision: Explain how the project will support measurable improvements in: • the quality of teaching and learning • learner success. • Learner retention Are any of the curriculum areas concerned inadequate and, if so, how will the project address these? Are any of the curriculum areas concerned inadequate and, if so, how will the project address these?

	In January 2016, Ofsted graded Harlow College Good for overall effectiveness. The Ofsted Data dashboard reported that Harlow College has value added significantly above average for academic and vocational qualifications and that no weaknesses were identified. The overall quality of learning and teaching at Harlow College is 92% good or better, of which 26% is outstanding. HAMEC supports the development of good and outstanding teaching. Whilst no curriculum area is inadequate, the College recognises the need to constantly improve and raise standards of teaching and learning and to deliver new skills that support learners to progress into meaningful employment. Provision in Engineering has been re-designed to better meet local advanced manufacturing employer needs and new Engineering units and new assessments have been developed for both full-time students and apprentices to make the most of the new state of the art facilities in HAMEC. Recruitment to HAMEC in year one has seen a growth in learners of 27%. Currently the retention rate within the cohort using HAMEC is 96%, which is up by 13% on previous years, with a predicted success rate of 92%. Additionally we have seen an increase in apprenticeships of 14% with 12 learners transitioning into Apprenticeships within their first year of full time study. Applications for 2018/19 are currently up by 42% over 2017/18. The additional investment will enable us to continue to promote and grow provision to further meet the needs of local engineering based employers. *(maximum 250 words, max score 6)*
	Other Growth Measures: Explain how the project will contribute to other growth measures, including: • widening participation by creating improved opportunities for learners with learning difficulties and disabilities • offering more flexible routes and opportunities to higher education The College will ensure learning support and reasonable adjustments are made available to those students with learning difficulties, and will provide handouts and programme notes on the College intranet, allow the recording of lectures, ensure course materials are written unambiguously and are clearly presented. Where required our learners will be supported by other support, eg translations, functional skills including IT, signing and hearing enhancers, large print text, specialist software. Early screening processes will identify specific learning needs. Staff are able to help with the presentation of work and provide constructive feedback on how learners can improve. Technologies are continually improving, enabling people with disabilities to work in professional engineering and operations, servicing and maintenance environments. However, there are circumstances where certain disabilities would limit or even prevent

	engineering work, eg visual impairments where complex wiring is involved. However, there are branches of engineering and building services, including design, product development and planning, where disability is no issue for employment. HAMEC will support learners with disabilities to make engineering their career choice. The Disability Discrimination Act makes it unlawful to automatically exclude a disabled person, or a group of disabled people from a particular job because of their impairment. The College will work with employers to ensure that our learners are not ruled out automatically on the basis of a health condition or disability. *(maximum 250 words, , max score 6)*
Supporting Economic Growth Please fully address the criteria in each section. Do not rely on evidence elsewhere in the document to show how you will meet the criteria.	**Alignment with LEP and local Priorities** Explain how the project will align with LEP and local skills priorities as outlined in the LEP Skills Strategy, Local Employment and Skills Board criteria in Annex C of the guidance and other supporting documents to tackle specific challenges and optimising local economic opportunities. Alignment will be achieved by meeting the demand for skills in advanced manufacturing, engineering and operations, servicing and maintenance, priority areas identified by SELEP for Greater Essex. The project will work with cutting-edge companies in growth sectors to increase the pool of skilled engineers and address issues of skills shortage and mismatch, where technology has moved ahead of their existing employees' skills. Manufacturing technologies are creating new growth opportunities with greater outsourcing of the design and manufacture of components to specialist SME subcontractors prior to final assembly. Improvements in technology increase specialisation. HAMEC will develop engineers able to deliver efficient processes and means of production, higher quality and better-tailored products will be produced, leading to higher value-added industries. SELEP identifies that businesses offering higher skilled activities in research, design, modelling and manufacturing have significant opportunity for growth in our region. Harlow has a significant cluster of manufacturing and engineering companies, including leaders in their field eg Raytheon, supported by a supply chain of high quality sub-contractors. Some, eg Clement Clarke International and SMS, cover advanced manufacturing and life sciences, another SELEP key sector. Advanced manufacturing employs 5,000 people in Harlow, 10,000 people across West Essex, including significant employers at Stansted Airport, demonstrating its importance to the region's economy in terms of both employment and gross value added. *(maximum 250 words, max score 18)*
	Skills shortages: Explain how the project will address skills shortages and/or support skills development in growth industries and sectors. Harlow employers report skills shortages in technical skills associated with advanced machinery and equipment, manufacturing problem

	solving, fabrication and quality techniques. They require growth in the number of qualified people, trained in technical and practical skills, ready to use the specialist equipment found in the workplace and for tailored workforce development. The project will increase the talent pool of employable, appropriately skilled, work ready young people and adults in the SELEP/Greater Essex priority sector of advanced manufacturing and engineering to address these skills shortages. Advanced Manufacturing and Engineering accounts for the employment of nearly 40,000 people across Essex in over 4,000 companies and is identified as a priority for growth by the Essex ESB. Local and regional advanced manufacturing employers must recruit 13,500 more engineers to fill emerging roles and those vacated by an imminently retiring workforce. Engineering and manufacturing employers report difficulties in recruiting people, regionally and nationally, into jobs with technical skills from entry level to highly skilled occupations. Future skills in demand include CNC experience and mechanical, electrical, electronics, design and development, production and process engineers. The additional equipment will further transform engineering provision in West Essex by developing young people on world-class manufacturing equipment, contributing towards solving the skills shortages prevalent in manufacturing. Our students will be experienced in using equipment that enables and encourages more complex engineering designs and ideas, that gives experience and development in technology that reduces lead and production times and improves accuracy, all of which encourage and improve productivity and growth. (250 Words maximum, *max score 18*)
	Industry relevance Explain how the project will provide industry relevant provision. HAMEC creates a clear technical education pathway to high skilled, high wage employment. It offers high quality industry-relevant teaching, using industry standard facilities and equipment. Its curriculum is responsive and agile in meeting the current and future needs of local, regional and national manufacturing and engineering industries. Technological advances will result in jobs requiring repetitive processing replaced with roles that require the understanding of materials, the ability to translate design into production, digital/ICT literacy, advanced technology and automation skills, production management and quality assurance. The additional equipment will further develop students, apprentices and employees in a broader set of technical skills that the UK manufacturing industry needs to stay competitive globally. The additional equipment will further develop for industry more rounded and readily employable young people with the technical and hand skills and the breadth of workplace experience necessary to secure an

	apprenticeship/higher apprenticeship enabling entry to high value, sustainable career pathways. Our students will be experienced in using equipment that enables and encourages more complex engineering designs and ideas, that gives experience and development in technology that reduces lead and production times and improves accuracy, all of which encourage and improve productivity and growth. It enables the College to engage more significantly with engineering and manufacturing employers to provide a better match between the supply and demand for skills and labour and start the development of a longer-term relationship with them around dedicated, specialist facilities, work related qualifications and training initiatives. (250 Words maximum, *max score 18*)
	Local links: Explain how the project has or will be linked with employers and local Employment and Skills Board/Learning Partnerships. Please explain how you have worked with your local ESB to develop this application. The project has existing strong partnerships with employers through: • HAMEC's Advisory Panel, comprising leading local advanced manufacturing employers, ensuring strong employer engagement in the design and delivery of the curriculum. • The partnership between the College and employers at the Harlow Enterprise Zone, a focal point for Advanced Manufacturing, and Engineering. • The partnership between the College and the Manchester Airport Group and employers at Stansted Airport. • Existing relationships with the Essex Chamber of Commerce, the Stansted Chamber of Commerce and the West Essex Skills Alliance. • The London Stansted Cambridge Corridor Consortium (LSCC) which brings together public and private sector organisations with the common aim of seeking economic growth, higher employment rates and support for strategic industry clusters and supply chains. • Consultation with the Manufacturing Technology Centre, Coventry. Harlow College works actively with the Essex Employment and Skills Board to develop and shape a college skills curriculum that is responsive to employers' current and future needs. The College and its projects are greatly informed by the Evidence Base that the Essex ESB produces which is considered in curriculum and strategic planning. Harlow College is an active member of the Federation of Essex Colleges, the Association of Colleges in the Eastern Region and the Essex Provider Network. HAMEC is the Eastern Region base for the National Forum for Engineering Centres. The new investment will enable us to work much closer with a larger group of schools in the development of future engineers, equipped with

	the skills and technical knowledge required from local employers. (250 Words maximum, *max score 18*)
	Added value: Demonstrate added value and increased economic impact of the outcomes, such as enabling entry to high value employment. The project increases the supply of technical skills that the local, regional and national economy needs to maximise productivity now and in the future and, over the years, will improve the life chances of thousands of young people. It will offer a clear route to high skilled, high wage employment and raise the prestige of technical education as a credible high quality complement to purely academic routes. The additional equipment will enable HAMEC to be developed at a sufficient scale to be successful in delivering high quality industry-relevant teaching and to make a demonstrable impact in meeting the skills and productivity challenges today and in the future. The new equipment outlined within this project will provide and meet skills demand in terms of relevance of training and shall strengthen and grow curriculum provision to fill skills gaps. For example, HAMEC will be the only provider regionally offering such a broad range of inspiring programmes with access to state of the art advanced manufacturing processes. It represents an innovative collaboration between FE, local schools and employers that capitalises on their strengths, leveraging assets, resources and relationships to produce a new learning offer that meets the demand for higher technical skills today and in readiness for future technological change. The economic impact of the project will also be demonstrated by: • adults building up and improving competences, and developing their career • disadvantaged groups, including those with learning difficulties and disabilities, having access to the labour market through increased opportunities for qualifications and employment. (250 Words maximum, *max score 18*)
	Support for other workplace provision: Explain how the project will support other work place provision, and provide clear routes to higher level training including higher level Apprenticeships. Harlow College has developed a range of Higher National Diploma and Higher National Certificate qualifications at Level 4, for example, HND/HNC Engineering and HND/HNC Business. The HNC qualifications are studied on a part time basis and are designed to fit around the learners' employment and workplace roles. Future plans include developing HND/HNC Engineered Housing. These form progression routes for learners who are employed.

Harlow College is in the process of developing clear routes from Apprenticeships to higher-level training including Higher Level Apprenticeships. This will be achieved by focusing on skills development as a response to technological and economic changes that contribute to productivity and high value employment, matching skills supply and demand by improving the quality of training and raising the quantity of learners trained.

The College currently offers Higher Apprenticeships in Engineering. With the additional investment, it is hoped that we will develop and deliver new pathways that our learners can access through Higher Apprenticeships. These include

- CMI Standards at undergraduate levels 4, 5 and 6 in Leaderships and Management to form a General Leadership and Management Degree Apprenticeship.
- Tech Partnership Standards at undergraduate levels 4, 5 and 6 in Software Engineering

(250 Words maximum, *max score 18*)

Section A5: Financial Value for Money and Project Funding/Finance

Project Funding/Finance

For all projects:
Complete the table below to show how you intend to fund/finance the project. If you have a grant from another public sector body, please specify the source to avoid duplication of match:

Project funding/financing	Capital cost (£)	Percentage of total project costs (%)
Requested reallocation of funds	£234,815	48
Applicant contribution (cash reserves)	£62,563[1]	13
Loan finance (if applicable)	N/A	
Third party contribution	N/A	
Other public sector grants (Please specify source in table below)	£187,852 (ECC – Subject to agreement)	39
Total	£485,230	100

Confirm if you have secured/guaranteed all funding (YES/NO) and complete the following table identifying funding sources:

[1] £600,000 VAT refunded on Harlow College's contribution to the construction of HAMEC will be transferred to spend on the Stansted Airport College project

Source of Other Funding	Amount of Funding (£)	Confirm if funding secured/guaranteed (Yes/No)
Essex County Council	£187,852	No, subject to agreement
Total	£187,852	

Additional comments (for example any conditions associated with the provision of third-party funding/financial contributions):

maximum 300 words

For projects requesting more than £150,000 and/or with a value of over £1 million:
Applicants will need to demonstrate that they will be financially viable after taking account of their contribution to the project, including any associated borrowings.

Applicants are required to submit a financial plan (Excel format – see annex B of the guidance document) as part of the application. The financial plan should be for at least two years after project completion. The required format can be found in Annex B of the guidance document and on the SELEP website.

Applicants will also have to score "compelling" for their "Benefits to learners" and "Supporting Economic Growth" sections if they are requesting more than 50% of the total project value.

Section A6: Measurable Objectives

Measurable Project Outputs

Provide a minimum of three specific, measurable, achievable, realistic and time-framed (SMART) objectives arising from the acquisition of the proposed equipment. Please note that, in the event of an award being made, the applicant will be monitored against the objectives/outputs detailed in this section.

maximum 300 words

The Harlow Advanced Manufacturing and Engineering Centre opened in January 2017 with agreed objectives and outputs. Additional to these established HAMEC outputs, the additional investment will enable us to meet the further outputs laid out below:

- Set up a fully equipped a dedicated project based workshop by

	September 2018 to assist in the delivery of engineering design. • Engage a minimum of 10 local primary/secondary schools annually, from September 2018, to promote, enthuse and inspire a target of 100 young engineers of the future through developing a F1 Project / School engagement workshop. This gives young people opportunities earlier in their school-life to engage with engineering 'hands-on' and learn through creating solutions to engineering problems with the support of college tutor expertise. We hope to encourage girls to engage with technology to increase the number of women entering engineering to tackle underrepresentation in the workplace. • By 2018, establish a Young Engineers Academy aimed at Years 7 – 11. • Arising from the experiences given to learners as a result of the investment, we will increase the number of relevant work placements by 30% annually. • By expanding the engineering technology accessed by our learners, HAMEC will aim to convert an annual additional 20% of learners progressing into apprenticeships.
Section A7: State Aid Risk Assessment	
State Aid Explanation	State Aid is financial support that is provided by the State to business organisations and State Aid rules exist to avoid public funded interventions distorting competition within the European Union. Generally State Aid is prohibited and unlawful. However there are number of exemptions, which if they apply, render the State Aid lawful and permitted. If you are an organisation covered by the FE and Skills Act i.e.: colleges, you are exempt from State Aid The relevant exemption in respect of this application is De Minimis Aid. For your application to be successful it must fall within the De Minimis Aid criteria. The relevant regulation is the Commission Regulation (EC) No 1998/2006 (De Minimis Regulations). Under the De Minimis Aid criteria there is a De Minimis Threshold. Where an applicant, parent company or subsidiary receives aid, over a three year period that exceeds the threshold, they will not be entitled to De Minimis Aid. To decide whether your application is eligible for De Minimis Aid we need to know if you or any company in your group of businesses have received state aid in the previous 3 financial years or expect to receive state aid in the next 3 financial years. The De Minimis Threshold is €200,000 (approximately £167,000) over the 3 financial years. If some aid has been received by the undertaking in previous years but this does not exceed the De Minimis Threshold

	then funding may be granted up to the De Minimis Threshold level. The threshold applies to all aid received by a parent company/group of businesses rather than just a subsidiary. Where the de minimis aid has been applied incorrectly then recovery will be for the full amount of the aid regardless of whether only part of it exceeds the threshold. **De Minimis Aid cannot be given in certain circumstances, these include:** • Aid to enterprises in road haulage operations for the acquisition of road freight transport vehicles. • Towards the same costs that are being supported under another block exemption or notified scheme. It is unlawful to provide De Minimis Aid for costs being funded under the State Aid cover of an exemption or notified scheme, if it means the specific allowable aid intensity will be exceeded. • Aid to enterprises in the agriculture sector (with the exception of those active in processing and marketing of agricultural products); • Aid to enterprises active in the coal sector; • Aid to undertakings in difficulty; • Aid for export-related activities, namely aid directly linked to the quantities exported, to the establishment and operation of a distribution network or to other current expenditure linked to the export activity. **You also need to be aware that if the European Commission considers that you are not eligible for De Minimis Aid the amount of aid awarded will be recoverable from you; with interest. It is therefore important that you are confident that you meet the De Minimis Aid criteria.** The following is not a comprehensive list of all possible forms of State Aid. However, it should give you an indication of common forms of State Aid which you may have been given over the past three years. If you are in any doubt as to whether previous assistance received would constitute State Aid, please raise your concerns with us as soon as possible. • Business rate reliefs on properties elsewhere in England • State grants • Interest rate relief • Tax relief • Tax credits • State guarantees or holdings • Direct subsidies • Tax exemptions
State Aid Declaration	SCF is a form of state aid, accordingly SELEP must know if the applicant received or is receiving state aid.

	Please complete one of the following two declarations, and submit with your application on company headed paper, duly signed. Your application will not be considered without this information being provided. I confirm that Harlow College has not received De Minimis aid nor does it expect to received de Minimis aid during the previous 3 financial years (this being the current financial year and the previous two financial years), or over the next 3 financial years. I acknowledge that I am authorised to sign on behalf of Harlow College and understand the requirements of De Minimis (EC Regulations 1998/2006). By signing below, I confirm that I represent Harlow College and that the information set out above is accurate for the purposes of the De Minimis exemption.
Section A8: Declaration	
Declaration	**I certify that the information provided in this application is complete and correct.**
Signature (Lead Applicant Chief Accounting Officer):	
Print Name:	Karen Spencer, Principal
Date:	6 March 2018

Skills Infrastructure Capital Fund
Form B: Capital Development Projects Only

Section B1: Applicant Contact Information	
Name of Lead Applicant Organisation:	Insert the legal name of the organisation applying for the SICF grant that is responsible for the application and all assets that this project will attract.
Lead Applicant Address:	
Contact Name and Job Title:	
Contact Telephone:	
Contact Email:	
Partner Organisations:	For projects submitted by a lead organisation on behalf of a number of associated partner organisations

Section B2: Project Details	
Employment and Skills Board Endorsement	Which area will you require endorsement from? (Kent, Essex or East Sussex)
Title of Project:	Insert the title you have given the project.
Project Summary:	Provide a brief description of the proposed capital project. Please state if there are any planning issues with the project and when you expect planning to be given. *maximum 300 words*
Total Project Cost:	£[ ]
Grant Requested:	£ [ ] Percentage [ ] of total project costs.
Value of Equipment included within the total project value:	£[ ] **Note:** Applicants requesting a grant for specialist items of equipment with a single item cost in excess of £100,000 should use Application Form A (above).
Location of Project:	Provide the address of the proposed project, including postcode.

Section B3: Need for Investment

<table>
<tr><td>Need for Investment:</td><td>Explain the key drivers for the project and how the project relates to LEP/government priorities. Outline what the project intends to achieve. Make it clear how the project links to the case for benefits to learners and economic growth (see section 4).
(maximum 500 words. This will not be scored but enables assessment panel to understand the bid)</td></tr>
<tr><td>Gross Internal Area of Project (GIA) m^2:</td><td>Complete table 1 below to identify the size and nature of the proposed skills project. Where a skills project is part of a larger project (for example a training facility within a larger building), then provide information relating solely to the skills/training facility.

Table 1: Gross Internal Area (GIA) of Project
<table><tr><th></th><th>GIA m^2</th></tr><tr><td>GIA of new build</td><td>[ ] m^2</td></tr><tr><td>GIA of space acquired (freehold or long lease)</td><td>[ ] m^2</td></tr><tr><td>GIA to be refurbished/remodelled</td><td>[ ] m^2</td></tr></table></td></tr>
<tr><td>Project Costs:</td><td>Complete the cost breakdown form for new build/remodelling/refurbishment projects.

Justify/explain any variances from the Skills Funding Agency's cost model.
maximum 400 words

For projects including leasehold properties:

Length of lease: [ ] years.

Date of first break clause: after [ ] years or state if not applicable.

Length of rent free period: [ ] years or state if not applicable.

Average rent each year (taking account of normal market concessions): £[ ]

Amount of capitalised rent included in project costs: £[ ]

Name of independent valuation adviser: [ ]

Confirm supporting evidence is submitted with the application: YES/NO</td></tr>
<tr><td>BREEAM (Building Research Establishment Environmental Assessment):</td><td>The LEP's expectation is that new-builds will achieve BREEAM 'Excellent' and refurbishments will achieve BREEAM 'Very Good'.

Confirm the targeted BREEAM rating for project.</td></tr>
</table>

	Confirm the work carried out to establish that it will achieve the appropriate standard (for example, the completion of a BREEAM pre-assessment report).
Acquisition details (if applicable, freehold/leasehold only):	State the areas (hectares and GIA in m^2) of the proposed site/buildings. Provide copy of heads of terms and details of professional advice and valuation obtained. *maximum 200 words*

Section B4: Specialist Equipment to be Purchased and Grant Requested

If you including equipment in your bid as well as building works please complete this section. Applicants requesting a grant for specialist items of equipment with a single item cost in excess of £100,000 should use Application Form A

Reminder: The LEP requires proof of all purchased equipment costs. Where equipment includes an element donated by third parties as part of the applicant's match funding, we also require evidence of the value attributed to this equipment. The LEP is unable to pay capital grant for items where there is no appropriate proof of the cost.

Description – including name and model of the equipment (The final item may be a different model as long as it provides the same or better function)	**Quantity (a)**	**Item Cost, including VAT if applicable (b) £**	**Total Cost including VAT if applicable (c)** (c = a x b) **£**
d - Total Purchase Price of all equipment (sum of c)			£
e- Total Grant support @ 50% (e = d x 50%)			£

Use of equipment.	Provide a short, simple and non-technical description explaining the specialist nature of the equipment required. *(maximum 500 words. This will not be scored but enables assessment panel to understand the bid)*

Section B5: How the Project Meets Key Investment Criteria - Benefits to Learners, Employers and Supporting Economic Growth

Please **DO NOT** remove criteria or headings from the form as this makes it difficult for those assessing the bids.

Impact on Growth

NOTE: In the responses to the questions in this section, it is important to refer to the learner number table and to include quantifiable targets and measures, as appropriate, to assist with an objective assessment of the application. Wherever possible, support your responses with proposed measurable impacts of the project.

Learner Numbers:

Complete Table 2 below to show the number of learners that will benefit from the project. (Please note, growth in learner numbers is not essential – for projects which will improve facilities for existing learners, you will need to explain the benefits of the investment in subsequent sections).

Table 2: Learners benefiting from the project

Learner Level	Learner numbers before project [1]		Learner numbers after project [2]		Change in learner numbers = [2-1]	
Level 1						
Level 2						
Level 3						
Level 4+						
Adult Skills Classroom-Based						
Adult Skills Workplace						
16-18 Apprenticeships	Intermediate:		Intermediate:		Intermediate:	
	Advanced:		Advanced:		Advanced:	
	Higher:		Higher:		Higher:	
Adult (19+) Apprenticeships	Intermediate:		Intermediate:		Intermediate:	
	Advanced:		Advanced:		Advanced:	
	Higher:		Higher:		Higher:	
Total						

Curriculum/Skills Areas:

Which skills sectors/levels will the project affect, including learner numbers? (NOTE: We will not assess this but it will assist with understanding the proposal.)

	maximum 200 words
Benefits to learners and employers	
	Tackling those not in employment, education or training (NEETs) and unemployment (if relevant): Explain how the project will have a positive and measurable impact on tackling: • 16-24 unemployment • adult unemployment • NEETs (*Maximum 250 words, max score 6)*
	Expanding and growing Apprenticeships: Explain how the project will support the expansion and growth of Apprenticeships, particularly in LEP priority sectors, with particular reference to: • how the project will have a positive and measurable impact on increasing and expanding 16-18 and 19-24 Apprenticeships • how the project will support the provision of enhanced progression routes to higher-level training, including higher-level Apprenticeships (*Maximum 250 words, max score 6)*
	Increasing employer engagement: Explain how the project will meet the needs of employers and provide them a greater role in shaping delivery, including: • How the project will support the business and skills requirements of employers, particularly small- and medium-sized enterprises (SMEs). • How employers will be given an on-going role in co-production of the curriculum and steering delivery of provision (*Maximum 250 words, max score 6)*
	Providing benefits to classroom-based learners: Explain how the project will provide benefits to classroom-based learners, including: • a positive and measurable impact on 16-18 learners • a positive and measurable impact on adult learners

	• a flexible resource base and industry-standard equipment and environments for vocational learning. *(Maximum 250 words, max score 6)*
	improving the quality (in particular success and retention rates) and the relevance of provision: Explain how the project will support measurable improvements in: • the quality of teaching and learning • learner success. • Learner retention Are any of the curriculum areas concerned inadequate and, if so, how will the project address these? *(Maximum 250 words, max score 6)*
	Other Growth Measures: Explain how the project will contribute to other growth measures, including: • widening participation by creating improved opportunities for learners with learning difficulties and disabilities • offering more flexible routes and opportunities to higher education • *(Maximum 250 words, max score 6)*
Supporting Economic Growth - how the project meets the key priorities of the LEP Skills Strategy (Annex B)	
	Alignment with LEP and local priorities Explain how the project will align with LEP and local skills priorities as outlined in the LEP Skills Strategy, Federated Area criteria in Annex C of the guidance and other supporting documents to tackle specific challenges and optimising local economic opportunities. *(Maximum 250 words, max score 18)*
	Skills shortages Explain how the project will address skills shortages and/or support skills development in growth industries and sectors. *(Maximum 250 words, max score 18)*
	Industry relevance Explain how the project will provide industry relevant provision.

	(Maximum 250 words, max score 18)
	Local links Explain how the project has or will be linked with employers and local Employment and Skills Board/Learning Partnerships. Please explain how you have worked with your local ESB to develop this application. *(Maximum 250 words, max score 18)*
	Added value Demonstrate added value and increased economic impact of the outcomes, such as enabling entry to high value employment. *(Maximum 250 words, max score 18)*
	Support for other workplace provision: Explain how the project will support other work place provision, and provide clear routes to higher level training including higher level Apprenticeships. *(Maximum 250 words, max score 18)*

Section B6: Financial Value for Money and Affordability	
Investment Appraisal and Running Costs:	**For projects with a value of over £1 million:** Applicants must submit their application with an investment appraisal (in Excel format) for at least their preferred option **and an alternative option**. The alternative option should reflect what the applicant would do if no LEP capital grant was forthcoming, in accordance with the 'HM Treasury Green Book: Appraisal and Evaluation in Central Government'. Applicants must use the Skills Funding Agency's simplified investment appraisal model available on the Capital Funding page on the GOV.UK website for this process, including supporting guidance notes: Applicants are required to complete this investment appraisal model for each option (alternative option and preferred option) as part of the application. The investment appraisal for the project proposal is not required to show a positive net present value (NPV). However, it should provide a more favourable result than the alternative option (that is, if both provide a negative NPV the proposed project should generate a smaller negative NPV than the alternative

option).

Complete the table below to show the cost and NPV of each option:

Option	Cost (£000)	NPV (£000)
Proposed project		
Base case		

Project Funding/ Finance:

For all projects:

Complete the table below to show how the project is to be funded/ financed.

Funding/Financing of Proposed Project

Project funding/financing	Capital cost (£000)
Private sector	£ [ ]
LEP Skills Capital Infrastructure Funding	£ [ ]
Applicant's contribution (cash reserves)	£ [ ]
Loan finance	£ [ ]
Disposal proceeds	£ [ ]
Other public sector grants	£ [ ]
Other	£ [ ]
Total	**£ [ ]**

Confirm if you have secured/guaranteed all non-LEP funding (YES/NO) and complete the table below to identify funding sources:

Funding Sources of Proposed Project

Source of Non-LEP Funding	Amount of Funding (£)	Confirm if funding secured/guaranteed (Yes/No)
Total		

Additional comments (for example any conditions associated with the provision of third-party funding/financial contributions):

For all projects over £1 million and all providers requesting grant in excess of £150,000:

	Applicants will need to demonstrate that they will be financially viable after taking account of their contribution to the project, including any associated borrowings. Applicants are required to submit a financial plan (Excel format) as part of the application. The financial plan should be for at least two years after project completion. See Annex B of the SELEP Skills Capital Fund application guidance. Applicants will also have to score "compelling" for their "Benefits to learners" and "Supporting Economic Growth" sections if they are requesting more than 50% of the total project value.
Expenditure Profile:	Complete the monthly expenditure template for the period 2016/17 to the planned completion date of the project. Confirm the amount of LEP capital funding to be claimed by 31 March 2017 [£]
Post-Project Reviews:	Confirm that you will submit a Post-Project Review (PPR) in the LEP's format within 12 months of the completion of the project: YES/NO (delete as appropriate).

Section B7: Programme	
Programme for Completion:	Outline the current position of project development. Provide a detailed project programme in the form of a Gantt chart. Show key milestones and timings relating to key aspects of the project (planning, procurement, contract award, project completion, and acquisition/disposal). *maximum 200 words*
Planning Consents:	Confirm current planning status, including constraints and potential issues (for example, s106, s278 agreements, listed buildings). *maximum 200 words*

Section B8: Measurable Project Objectives	
Measurable Project Outputs	Provide a minimum of three specific, measurable, achievable, realistic and time framed (SMART) objectives/outputs for the proposed capital project. *maximum 300 words*

Section B9: State Aid Risk Assessment	
State Aid Explanation	State Aid is financial support that is provided by the State to business organisations and State Aid rules exist to avoid public funded interventions distorting competition within the European Union. Generally State Aid is prohibited and unlawful. However there are number of exemptions, which if they apply, render the State Aid lawful and permitted. If you are an organisation covered by the FE and Skills Act i.e.: colleges, you are exempt from State Aid The relevant exemption in respect of this application is De Minimis Aid. For your application to be successful it must fall within the De Minimis Aid criteria.

The relevant regulation is the Commission Regulation (EC) No 1998/2006 (De Minimis Regulations).

Under the De Minimis Aid criteria there is a De Minimis Threshold. Where an applicant, parent company or subsidiary receives aid, over a three year period that exceeds the threshold, they will not be entitled to De Minimis Aid.

To decide whether your application is eligible for De Minimis Aid we need to know if you or any company in your group of businesses have received state aid in the previous 3 financial years or expect to receive state aid in the next 3 financial years.

The De Minimis Threshold is €200,000 (approximately £167,000) over the 3 financial years. If some aid has been received by the undertaking in previous years but this does not exceed the De Minimis Threshold then funding may be granted up to the De Minimis Threshold level. The threshold applies to all aid received by a parent company/group of businesses rather than just a subsidiary.

Where the de minimis aid has been applied incorrectly then recovery will be for the full amount of the aid regardless of whether only part of it exceeds the threshold.

De Minimis Aid cannot be given in certain circumstances, these include:

- Aid to enterprises in road haulage operations for the acquisition of road freight transport vehicles.
- Towards the same costs that are being supported under another block exemption or notified scheme. It is unlawful to provide De Minimis Aid for costs being funded under the State Aid cover of an exemption or notified scheme, if it means the specific allowable aid intensity will be exceeded.
- Aid to enterprises in the agriculture sector (with the exception of those active in processing and marketing of agricultural products);
- Aid to enterprises active in the coal sector;
- Aid to undertakings in difficulty;
- Aid for export-related activities, namely aid directly linked to the quantities exported, to the establishment and operation of a distribution network or to other current expenditure linked to the export activity.

You also need to be aware that if the European Commission considers that you are not eligible for De Minimis Aid the amount of aid awarded will be recoverable from you; with interest. It is therefore important that you are confident that you meet the De Minimis Aid criteria.

The following is not a comprehensive list of all possible forms of State Aid. Howe should give you an indication of common forms of State Aid which you may have given over the past three years. If you are in any doubt as to whether previous assistance received would constitute State Aid, please raise your concerns with soon as possible.

- Business rate reliefs on properties elsewhere in England
- State grants
- Interest rate relief

	• Tax relief • Tax credits • State guarantees or holdings • Direct subsidies • Tax exemptions
State Aid Declaration	SCF is a form of state aid, accordingly SELEP must know if the applicant received or is receiving state aid. Please complete one of the following two declarations, and submit with your application on company headed paper, duly signed. Your application will not be considered without this information being provided. Declaration 1 I confirm that [INSERT ORGANISATION/COMPANY] the organisation named above **has not received De Minimis aid nor does it expect to received de Minimis aid** during the previous 3 financial years (this being the current financial year and the previous two financial years), or over the next 3 financial years. I acknowledge that I am authorised to sign on behalf of [INSERT ORGANISATION/COMPANY] and understand the requirements of De Minimis (EC Regulations 1998/2006). By signing below, I confirm that I represent [INSERT ORGANISATION/COMPANY] and that the information set out above is accurate for the purposes of the De Minimis exemption. OR Declaration 2 I confirm that [INSERT ORGANISATION/COMPANY] **has received or will be receiving the following De Minimis aid** during the previous 3 fiscal years (this being the current fiscal year and the previous two fiscal years) or the next 3 fiscal years; Organisation providing the assistance/aid: | Value of assistance: | Nature of assistance: | Date of assistance: | I acknowledge that I am authorised to sign on behalf of [INSERT ORGANISATION/COMPANY] and understand the requirements of De Minimis (EC Regulations 1998/2006). [INSERT ORGANISATION/COMPANY] is not a business “in difficulty” as defined at 2.1 of the Community Guidelines and State Aid for Rescuing and Restructuring Firms in Difficulty (2004/C22/02) at the date of this declaration. By signing below, I confirm that I represent [INSERT ORGANISATION/COMPANY] and that the information set out above is accurate for the purposes of the De Minimis exemption.

Section B10: Declaration	
Declaration:	**I certify that the information provided in this SCF application is complete and correct.**
Signature (Applicant Chief Operating Officer):	
Print Name:	
Date:	