

Subject Description Form

Subject Code	AAE5107
Subject Title	Aviation Engineering Services and Aircraft Leasing Management
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	<p>This subject will provide students with</p> <ol style="list-style-type: none"> 1. the operations and management of aircraft leasing industry; and 2. the advanced knowledge of aviation finance, taxation and insurance. 3. the advanced knowledge on the major operational, technical and inventory support functions to the airline industry
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> a. develop and apply various auditing techniques in the MRO and airline industry; b. conduct aviation engineering related incident/event investigation using state-of-the-art methodologies and implement various corrective actions; c. define and manage the major engineering operational reliability key drivers; d. assess and evaluate the cost effectiveness of various non-mandatory engineering bulletins and their implementation; e. apply various strategies and techniques to optimise and implement aircraft maintenance programmes; f. understand and apply the various inventory support models to the airline; g. understand the roles and functions of various airlines business in aircraft leasing and aviation financing management; h. evaluate the cost-and-benefit in various aircraft trading modes and aircraft leasing approaches; and i. perform risk assessment and management related to aircraft leasing.
Subject Synopsis/ Indicative Syllabus	<p>Operational and technical Support: Technical support functions in maintenance, repair and overhaul; quality assurance audits, audit checklist development, hazard and risk management, management of accident/incident development, implementation and optimisation of maintenance programmes, development and monitoring of operational reliability related key performance indicators, cost-benefit analysis in service bulletin evaluation process, major inventory support models and</p>

	<p>their implementation;</p> <p>aircraft leasing management: Aircraft specification review and evaluation; Auditing of aircraft and their records; Aircraft lease management; Operating lease structuring; Sales and leasebacks; Transaction risk assessment; Aircraft acquisition.</p>																																																					
<p>Teaching/Learning Methodology</p>	<p>Teaching is conducted through class lectures, which are aimed at providing students with the understanding of how to address aviation technical services and aircraft leasing problem and resolve the problem by risk assessment and operational management methods.</p> <table border="1"> <thead> <tr> <th rowspan="2">Teaching/Learning Methodology</th> <th colspan="9">Outcomes</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> <th>f</th> <th>g</th> <th>h</th> <th>i</th> </tr> </thead> <tbody> <tr> <td>Lecture</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> </tr> </tbody> </table>	Teaching/Learning Methodology	Outcomes									a	b	c	d	e	f	g	h	i	Lecture	√	√	√	√	√	√	√	√	√																								
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Reading List and References

1. Anyafo, A. (2018). Buy or Lease Decision in Fixed Assets Acquisition in the Nigerian Civil Aviation Industry. *Journal of Administration*, 1(1).
2. Coulter, J. M., Redpath, I. J., & Vogel, T. J. (2018). Leasing Agreements in the Airline Industry: A Case Study Examining the Impact of Asu 2016-02. *Journal of Business and Educational Leadership*, 7(1), 114-123.
3. Donald H. Bunker. *International Aircraft Financing (Volume 1 – General Principles and Volume 2 – Specific Documents)*.
4. Gillen, D., & Morrison, W. G. (2015). Aviation security: costing, pricing, finance and performance. *Journal of Air Transport Management*, 48, 1-12.
5. Keaveny, C., & Murray, S. (2013). Aviation finance and leasing. *Offshore Investment*, 239, 12-14.
6. Mann, E. D. (2009). Aviation finance: An overview. *Journal of Structured Finance*, 15(1), 109.
7. Murphy, R., & Desai, N. (Eds.). (2011). *Aircraft financing*. Euromoney Books.
8. Morrell, P. S. (2013). *Airline finance*. Ashgate Publishing, Ltd.
9. Vasigh, B., Fleming, K., & Humphreys, B. (2014). *Foundations of airline finance: Methodology and practice*. Routledge.
10. Vitaly S. Guzhva, Sunder Raghavan, Damon J. D'Agostino (2018). *Aircraft Leasing and Financing: Tools for Success in International Aircraft Acquisition and Management*. Elsevier Science.
11. Wensveen, J. (2018). *Air transportation: A management perspective*. Routledge.
12. Kinnison, Harry A., and Tariq "Terry" Siddiqui (2013). *Aviation Maintenance Management*. 2nd ed. New York: McGraw-Hill Education.