

<b>COURSE TITLE</b>	<b>TE142347: Biometric System</b> Credits: 3 Semester: III
<b>LEARNING OBJECTIVES</b>	Students have the knowledge about single modal and multi modal biometric system and failure process in identification and how to solve it using ROC curve.
<b>COMPETENCY</b>	<ul style="list-style-type: none"> <li>• Students can explain the design methods of single modal and multi modal biometric system.</li> <li>• Students can explain failure process in identification of biometric system and how to reduce it.</li> </ul>
<b>SUBJECTS</b>	<ul style="list-style-type: none"> <li>• Phenomenon of biometrics.</li> <li>• Single modal and multi modal biometric identification for recognition.</li> <li>• Failures in biometric identification and how to solve them.</li> <li>• ROC curve.</li> <li>• Biometric system using ROC curve.</li> </ul>
<b>MAIN REFERENCES</b>	Anil K. Jain, Patrick Flynn, Arun A. Ross, <u>Handbook of Biometrics</u> , Springer Verlag 2005
<b>OPTIONAL REFERENCES</b>	<ul style="list-style-type: none"> <li>• M. Negin, T. A. Chmielewski, M. Salganicoff, T. A. Camus, U. M. C. von Seelan, P. L. Venetianer, and G. G. Zhang. <u>An Iris Biometric System for Public and Personal Use</u>. IEEE Computer, 33(2):70–75, February 2000.</li> <li>• M. S. Nixon, J. N. Carter, D. Cunado, P. S. Huang, and S. V. Stevenage. Automatic Gait Recognition. In A. K. Jain, R. Bolle, and S. Pankanti, editors, <u>Biometrics: Personal Identification in Networked Society</u>, pages 231–249. Kluwer Academic Publishers, London, UK, 1999.</li> <li>• L. O’Gorman. <u>Comparing Passwords, Tokens, and Biometrics for User Authentication</u>. Proceedings of the IEEE, 91(12):2019–2040, December 2003.</li> <li>• P. J. Phillips, P. Grother, R. J. Micheals, D. M. Blackburn, E. Tabassi, and J. M. Bone. FRVT2002: <u>Overview and Summary</u>. <a href="http://www.frvt.org/FRVT2002">http://www.frvt.org/FRVT2002</a>, March 2003.</li> </ul>
<b>PREREQUISITE</b>	<ul style="list-style-type: none"> <li>• Discrete Mathematics and Graph Theory</li> <li>• Multimedia Network</li> </ul>