The Graduate Certificate in Application-Specific Integrated Circuits (ASIC) Design and Verification (ADV) Technologies provides students with advanced academic credentials in the algorithmic, chip, circuit, system and antenna technologies that will underpin ADV Wireless systems. Advanced silicon chips, including ASIC, power the remarkable systems we rely on every day. They serve as the foundation for everything from smartphones to wearables and from smart medical devices to autonomous cars.

**More Information**
Distance Website (https://online-distance.ncsu.edu/program/asic-design-and-verification/)

**Eligibility**
Students must meet ONE of the following requirements for admission into the ADV Graduate Certificate Program:

- Have a BS degree in Electrical or Computer Engineering from a regionally accredited four-year college or university, and have an overall GPA of at least 3.0 on a 4-point scale.
- Have a BS degree in the sciences or engineering from a regionally accredited four-year college or university with an overall GPA of at least 3.0 on a 4-point scale.
- Be a degree-seeking student in good standing in an NC State University graduate program in the sciences or engineering.

**Application Information**
- **Delivery Method**: On-Campus, Online, Hybrid
- **Entrance Exam**: None
- **Interview Required**: None

**Application Deadlines**
- **Fall**: January 9
- **Spring**: July 1

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<td>ASIC and FPGA Design with Verilog</td>
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**Faculty**

**Full Professors**
- David E Aspnes
- B. Jayant Baliga
- Mesut E. Baran
- Salah M. A. Bedair
- Subhashish Bhattacharya
- Donald L. Bitzer
- Alper Yusuf Bozkurt
- Gregory T Byrd
- Rada Yuryevna Chirkova
- Mo-Yuen Chow
- Huaiyu Dai
- William Rhett Davis
- Alexandra Duel-Hallen
- Michael James Escuti
- Do Young Eun
- Brian Allan Floyd
- Paul D. Franzon
- Edward F. Gehringer
- John J. Grainger
- Edward Grant
- Robert Wendell Heath
- Brian L Hughes
- Iqbal Husain
- Ki Wook Kim
- Frederick Anthony Kish Jr.
- Robert Michael Kolbas
- Hamid Krim
- Ning Lu
- Srdjan Miodrag Lukic
- Leda Lunardi
- Thomas Kenan Miller III
- Veena Misra
- Rainer Frank Mueller
John F. Muth
H. Troy Nagle Jr.
Jagdish Narayan
Arne Nilsson
Omer Oralkan
Mehmet Cevdet Ozturk
Harilaos George Perros
Douglas Stephen Reeves
Eric Rotenberg
Georgios Rouskas
Xipeng Shen
Mihail Lorin Sichitiu
Zlatko Sitar
Matthias F. M. Stallmann
Daniel D. Stancil
Michael B. Steer
J. K. Townsend
James Tuck
Daryoosh Vashaee
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Ioannis Viniotis
Mladen Alan Vouk
Wenye Wang
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David Ricketts
Nilin Sharma
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Michael Daniele
Demitry Farfurnik
Caterina M. Gallippi
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Shih-Chun Lin
Yuan Liu
Spyridon Pavlidis
Bradley Galloway Reaves
Muhammad Shahzad
Wenyuan Tang
Chau-Wai Wong
Tianfu Wu
Kaixiong Zhou

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Dror Zeev Baron
Michela Becchi
Aranya Chakraborty
Hantao Cui
Alexander G. Dean
Ismail Guvenc

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Laura J Bottomley
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Robert Joseph Evans
John Gajda
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Yan Solihin

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Frederick J. Livingston