Marist IDCP Certificate Program

z Series

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Agenda

- ***Marist IDCP Programs***
  - ***On Line Data Center Programs***
  - ***On Line z/OS Certificate Programs***
- Marist z9 Knowledge Center

Marist IDCP Certificate Program

Mainframe Training for IT Professionals

Distinguishing Characteristics:

- Available worldwide

- Technology Focused, Business exposure

- Taught by Industry Experts
  - **29 Years avg. experience with z**

Marist IDCP Certificate Program

- **Format**
  - Fully online, web based delivery
    - iLearn/Sakai collaborative learning environment
    - Asynchronous interactions – no "meeting" times
  - 10-12 week courses
  - Instructor led (not self paced)

- **Cost**
  - Significantly reduced with scholarship funding from IBM and New York State (NYSTAR)
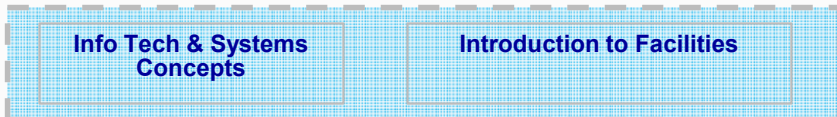
Data Center Technologies

Anticipated enrollment (# of individuals in courses in 12 month period= 150
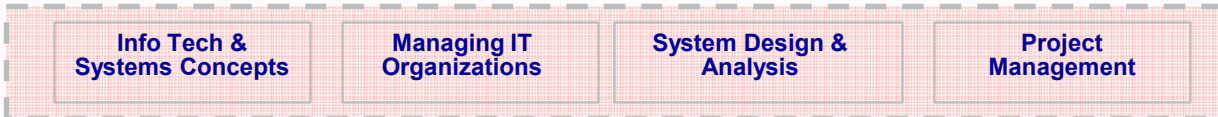
Systems and Software- 9 credits

| Info Tech & Systems Concepts | Introduction to Programming | Arch. Of Hardware & Software |

**Advanced Facilities Management
12 weeks/non-credit**

Facilities Management- 6 credits

| Info Tech & Systems Concepts | Introduction to Facilities |

**The Greening of the Data Center
10 weeks/non-credit**

Networking-9 credits

| Info Tech & Systems Concepts | Data Communication | Internetworking |

Operations & Process Management-12 credits

| Info Tech & Systems Concepts | Managing IT Organizations | System Design & Analysis | Project Management |

Security-9 credits

| Info Tech & Systems Concepts | System Administration & Management | Internet Security |

Product Development & Financial Planning-9 credits

| Info Tech & Systems Concepts | Accounting for the Data Center | Project Management |

**Successful Completion of all six certificates leads to 7th
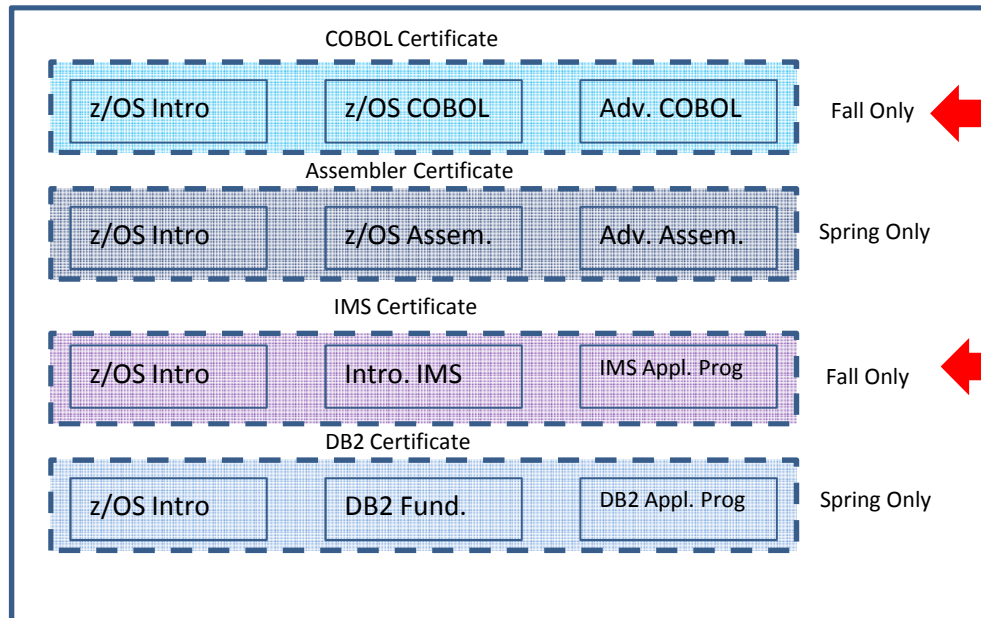Certificate as a Certified Data Center Professional**

z/OS Certificate Program Overview

$2,700 (3 classes)

System Programming Track

Associate Certificate	Professional Certificate	Expert Certificate
z/OS Intro — z/OS Networking — z/OS Security	z/OS Advanced Topics — z/OS RAS & Prob. Determ — z/OS Emerg. Technologies	Performance Fundamentals — z/OS Install — DB2 Fund.
Spring / Fall	Fall Only	Fall Only
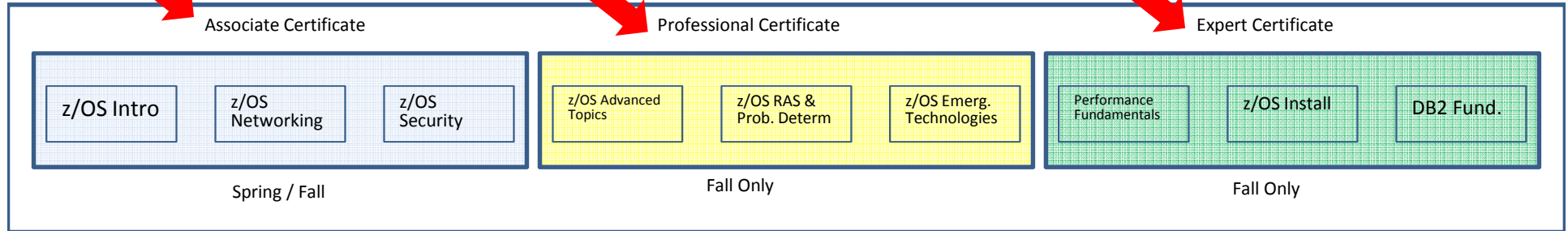
- 7 Certificates
- 16 Unique Courses

Application Programming Tracks

COBOL Certificate

| z/OS Intro | z/OS COBOL | Adv. COBOL | Fall Only |

Assembler Certificate

| z/OS Intro | z/OS Assem. | Adv. Assem. | Spring Only |

$2,000 (3 classes)

IMS Certificate

| z/OS Intro | Intro. IMS | IMS Appl. Prog | Fall Only |

DB2 Certificate

| z/OS Intro | DB2 Fund. | DB2 Appl. Prog | Spring Only |

$2,000 (3 classes)

See www.idcp.org/learnzos for details

Marist z/OS Certificate Program

System z Associate Certificate

Modules /Classes

- Introduction to z/OS and Major Subsystems
- Introduction to z/OS Networking
- Introduction to z/OS Security

- All modules approved for credit (3 each)
- Several students have passed the z/OS Mastery exam following the 1st module

z Series

Marist z/OS Certificate Program

System z Professional Certificate

Modules / Classes

- z/OS Advanced Topics
- z/OS RAS and Diagnostics
- z/OS Emerging Technologies

- Qualifying exam for direct entry to Professional Certificate
- All modules approved for credit (3 each)

z Series

Marist z/OS Certificate Program

System z Expert Certificate

Modules / Classes

- z/OS Installation
- DB2 Fundamentals
- z/OS Performance Fundamentals (new '10)
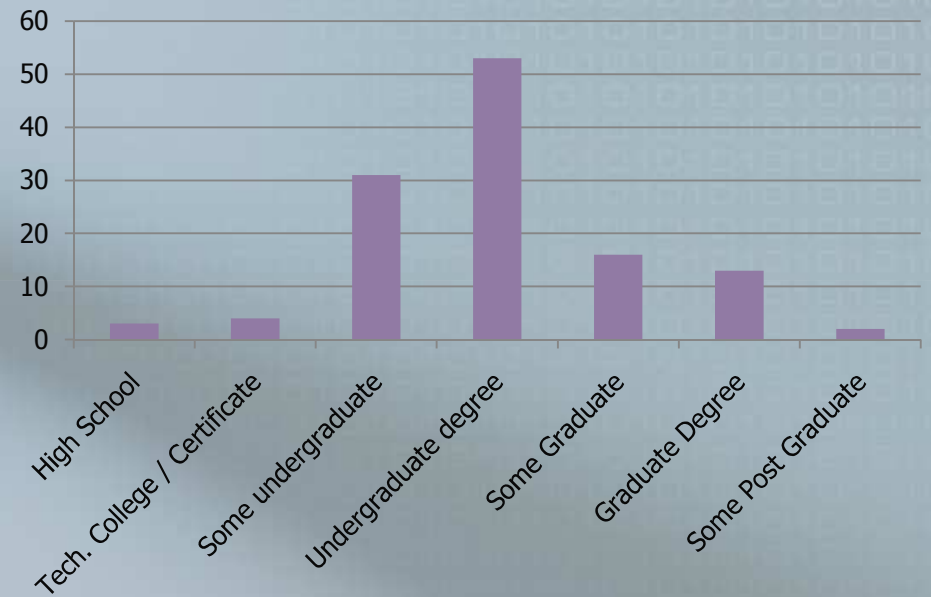
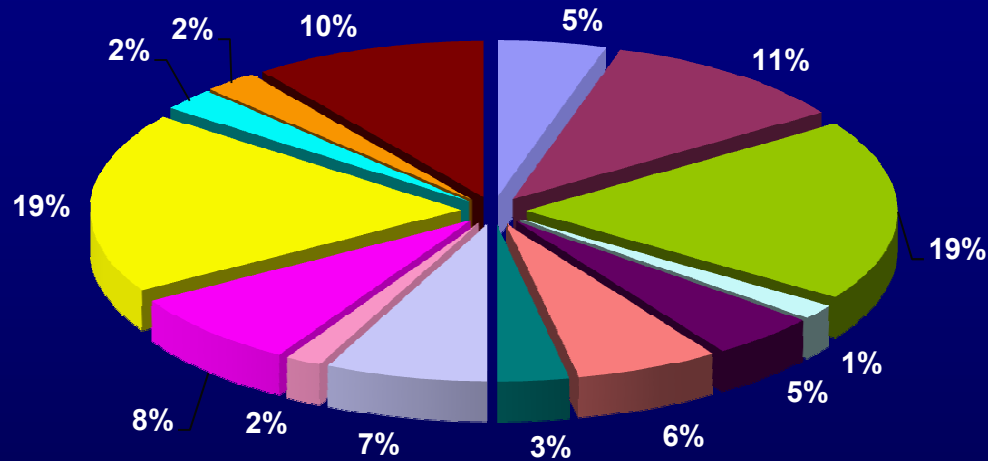- All three will be reviewed for credit offering

z Series

Marist z/OS Certificate Program Participant Demographics

- Traditional Undergraduate (18-21)
  - 5%
- New Hire (22-29)
  - 25 - 30%
- Experienced (30-50)
  - 50 – 60%
- Other
  - 5%

2006-2008

A bar chart with values on the y-axis from 0 to 60. The x-axis categories and approximate values:
- High School: 3
- Tech. College / Certificate: 4
- Some undergraduate: 31
- Undergraduate degree: 53
- Some Graduate: 16
- Graduate Degree: 13
- Some Post Graduate: 2

z/OS Program Student Demographics

2006- 2008 System z Cohort
Level of Education by Degree and Major

Legend:
- BA majors in English, Psychology, Music
- BS majors in Acctg., Math., Finance, Mgmt., Biology
- BS majors in CS, IS, IT
- BA w/some graduate courses
- BS w/some graduate courses
- BS w/some graduate courses in CS, IS, IT
- MS majors in Business & Tech.
- MS majors in CS, IS, IT
- MS w/some post graduate courses in CS
- Undergraduate Certificate /Associates
- Undergraduate Credits
- Other -Technical College Certificate
- Other - High School
- Undefined - No Data

Pie chart values: 5%, 11%, 19%, 1%, 5%, 6%, 3%, 7%, 2%, 8%, 19%, 2%, 2%, 10%

Marist z/OS Certificate Program

- **Feedback from Intro to z/OS students:**
  - "The text used for the class is well written; the lectures are well done. <u>Supplemental materials are well chosen</u>."
  - "I have absolutely no regrets having taken this class. <u>This class exceeded my expectations</u> and prepared me for the courses to follow."
  - "I did like that there was <u>a strong component of ongoing evaluation</u> through quiz scores rather than an emphasis on just one or two exams."

Marist z/OS Certificate Program

- **Feedback from z/OS Networking student:**
  - "I knew enough about TCP/IP and VTAM to get by, … <u>self taught on the job</u>. The text and lectures were all very informative. Additionally, the <u>extra lectures are invaluable – giving information that really opened my eyes</u>.

    Also, knowing the configuration files, the assortment of display commands, and reference guides has <u>already proven beneficial in my current job, both technically and when communicating.</u>"

Marist z/OS Certificate Program

Participant Feedback:

Associate Certificate

- "It's making a difference in my day to day activities as a system programmer. Because of the training, <u>new tasks are less daunting and I'm more familiar with resources to assist me.</u>"

  Chris Larson
  Systems Programmer
  Donovan Data Systems, Inc.

- I would like to thank everyone at Marist for this program. It has not only been an excellent review for me, but I have learned as well. I have recommended this course to everyone I knew would benefit from it. I eagerly look forward to the Professional Certificate curriculum.

  Robert Christian
  Systems Engineer
  ISO

Marist z/OS Certificate Program

Participant Feedback:

Professional Certificate

- "WOW, that's really all I can say. … I was very excited to see all of the new things that DB2 is offering and how our System z continues to evolve with client needs and requests. ..I am excited about the future of our mainframe and my career. In fact, I was so excited by this presentation, that I started to consider my options and what types of moves I might want to make to get my foot in the door with DB2. Really, it was that good!"

Samuel Smith
IBM, DF/SMS

Participating Enterprises (ordered, more than one participant)

1. Citigroup
2. Nationwide Insurance Co.
3. Progressive Insurance
4. IBM
5. Verizon
6. Aetna, Inc.
7. Boston University
8. Insurance Services Offices(ISO)
9. Commonwealth office of Tech, State of KY
10. Wachovia Bank
11. Bank of America
12. Marist (F/T)
13. MassMutual Financial Group
14. Aegon USA
15. Great-West Life
16. T. Rowe Price
17. Thomson Financial-Transaction Services
18. EMC
19. Liberty Mutual Insurance Company
20. M& T Bank
21. Tata Consulting

Participating Enterprises (all)

Accenture S.A.
ACG - Auto Club Group
Aegon USA
Aetna, Inc.
Aformatik Training & Consulting GmbH & Co
Archer Daniels Midland
KG
Alcan Global ATI- North America
Ameritech
Atlantic & Pacific Tea Company
Auto Zone
Bank of America
Bank of Tokyo
BMC Software
Boston University
CIGNA Healthcare
Citigroup
Commonwealth office of Tech, State of KY
Credit Suisse
Depository Trust & Clearing Corporation
Donovan Data Systems
EMC
Emirates Airlines
Fidelity Investments
Great-West Life
IBM
Insurance Services Offices(ISO)
JP Morgan Chase
Kawasaki Motors Corp. USA
LexisNexis

Liberty Mutual Insurance Company
Louisiana Housing Fin Ag / Baton Rouge C.C.
Marist (F/T)
MassMutual Financial Group
Merlin International – Veterans Affairs
Metavante
Mitchell Martin
M & T Bank
Mortgage Guaranty Ins. Co.
Nationwide Insurance Co.
New York University
Norfolk Southern Corporation
NYS Dept of Tax & Fin
OCIT, Sacramento Cty
Outsourcing deTecnica deSistemas - Hardware
Ohio Public Employees Retirement System
Partsearch Technologies
Progressive Insurance
PSC Electrical Contracting
Rutgers University - Office of IT
SAIC
Sears Holdings Corporation
Self Employed Consultant
TAG
Tata Consulting
Thompson Financial- Transaction Services
T. Rowe Price
Unum Group
Verizon
Wachovia Bank
Washington State Department of Transportation

Marist z/OS Joint Advisory Board

Marist Department of Computer Science
    Director of z/OS Program (chair)
    Dean and Assistant Dean

IBM
    Key Technical Leaders
    Academic Initiative Team

Industry
    Aetna Insurance   Medco
    Bank of America   Progressive Insurance
    Bank of Montreal   RBC
    BMC Software   Regions Bank
    Broadridge   Rocket Software
    Charles Schwab   Tata Consulting
    Citigroup   TD Bank
    Computer Sciences Corp. UBS
    Computer Associates   Verizon
    EMC   US Dept. of Veterans Affairs
   M&T Bank   Wachovia

Additional members welcome !

Agenda

- **Marist IDCP Programs**
  - On Line Data Center Program
  - On Line z/OS Certificate Program
- ***Marist z9 Knowledge Center***

Marist College "Knowledge Center"

- Provides remote (internet) mainframe z/OS access for professors and students
- 176 schools and 425 professors have used the Knowledge Center (as of 1/10)
  - Currently supporting 44 active classes and 59 professors
- Over 4500 User Ids issued for hands on education
- Steadily increasing number of professors and students
- Very high ratings and positive professor feedback for quality of service

University A University B

University C

University D

System z Hub – Marist College NY
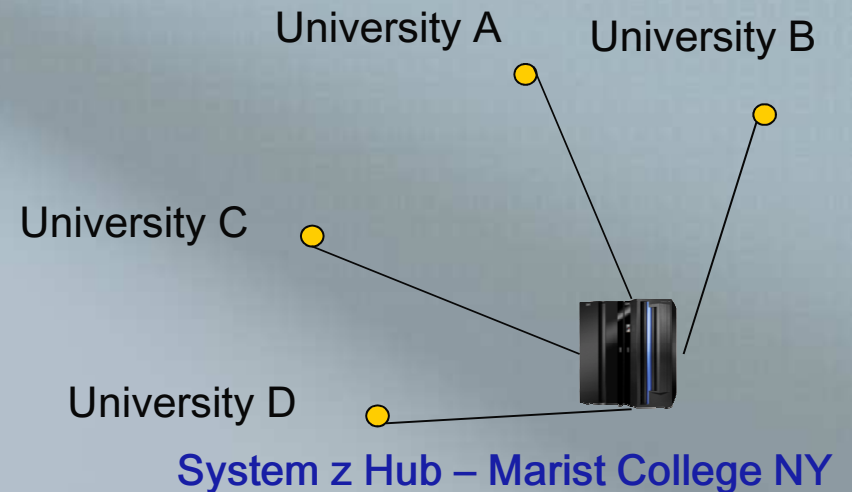
Knowledge Center Software

- z/OS 1.9
- DB2 9.1
- CICS 3.1
- Enterprise COBOL for z/OS 3.4.1
- HLASM R5.0
- Enterprise PL/I for z/OS
- The DFSMS level is z/OS 1.7.0
- The TSO level is 3.6.0
- The ISPF level is z/OS 01.09.00 (ISPF 5.7)
- The VTAM level is 6.1.7
- Rational Developer/z 7.5 (host)

Marist IDCP Certificate Program

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for IT Professionals**

**Distinguishing
Characteristics:**

- Available worldwide

- Technology Focused,
  Business exposure

- Taught by Industry
  Experts
    - **29 Years avg.
      experience with z**

--- IMS Specifics --

The IMS offering is intended to provide fundamental Training for either application programmers or Sysprog/DBAs in a three part program that share a common fundamentals track and then diverge into 2 separate tracks for the 3rd part.

IMS Courses for the Marist IDCP Program

Don Streicher

IMS Certificate Program Overview

System Programming Track

Associate Certificate

z/OS Intro	z/OS Networking	z/OS Security

Spring / Fall

Professional Certificate

z/OS Advanced Topics	z/OS RAS & Prob. Determ	z/OS Emerg. Technologies

Fall Only

Expert Certificate

Performance Fundamentals	z/OS Install	DB2 Fund.

Fall Only

- 3 Classes
- 2 IMS Tracks

IMS Programming Tracks

IMS Application Programming Certificate

z/OS Intro	Intro. IMS	IMS Appl. Prog

Fall Only

$2,000 (3 classes)

IMS Sysprog/DBA Certificate

z/OS Intro	Intro. IMS	IMS SysProg/DBA

Fall Only

$2,000 (3 classes)

See www.idcp.org/learnzos for details

IMS Fundamentals

- Purpose
  - This course is designed to present an introduction to the basic facilities of IMS, how these facilities work together, and how application programs interact with them. The course presents the IMS Database System, the IMS Transaction Manager, and their use in today's modern Enterprise Systems.

- Audience
  - Users who want a basic understanding of the IMS Database and IMS Transaction Manager products, and data processing personnel who will be working with an IMS System (DB, DB/DC, DBCTL).

IMS Fundamentals Course Topics

- **IMS Overview**
- **IMS Transaction Manager**
- **IMS Transaction Management & Connectivity**
- **IMS Database Introduction**
- **IMS DBRC**
- **IMS System Definition & Customizing**
- **IMS application processing**
- **IMS Operations & Monitoring**
- **Introduction to IMS Parallel Sysplex & High Availability**

IMS Application Programming

- **Purpose**
  - This course is designed to present the skills needed to write application programs that interface with the IMS Transaction Manager, and use DL/I to process IMS databases

- **Audience**
  - Personnel responsible for writing programs in the COBOL language to interface with the IMS Transaction Manager and process IMS databases.

IMS Application Programming Topics

- IMS DB Programming
  - DL/I Environment
  - DL/I Call Processing
  - DL/I Retrieval Calls
  - DL/I Update Calls
  - Programming Techniques
  - Advanced Segment Search Arguments
  - DL/I Test Program
  - System Service Calls
- IMS TM Programming
  - IMS/TM System Overview
  - Message Processing Programming
  - Message Format Services
  - IMS/TM Additional Facilities

IMS Systems Programming and Database Administration

- ## Purpose
  - This class is intended for system programmers who will be installing and supporting an IMS Database & Transaction Management system, or performing IMS database Administration

- ## Audience
  - This course is intended for students who are
    - Responsible for the installation and maintenance of a IMS DB/DC System,
    - Responsible for the Administration of IMS Databases

For more information

- Please visit:

  www.idcp.org