NEW HORIZON COLLEGE OF ENGINEERING DEPARTMENT OF ELECTRONICS AND COMMUNICATION <u>FEEDBACK SUMMARY FOR THE YEAR 2015-16</u>

Summary of feedback from the Students:

- 1. More implementation of modern technology is required.
- 2. Current advancements should be kept up in the curriculum.
- 3. Every student must be actively encouraged to participate in co-curricular activities
- 4. It would be nice if there was more hands-on learning than mere theory.

Summary of feedback from the Parents:

- 1. Please improve the hostel stay procedures.
- 2. More hands-on learning through College labs from Industry experts can be very useful.
- 3. Syllabus needs to be concentrated more on practical and daily life situations.

Summary of feedback from the Alumni:

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- 1. Guide students with real robotics and VLSI related tools and give talks on the same..
- 2. Mentoring Must be more rigurous
- 3. Industry related topics need to be included in the syllabus and revise the syllabus.
- 4. HDL course is presented in a good manner

- 1. More electives to be included so that industry standards are kept up
- 2. Make students to focus on technical knowledge than aptitude.

NEW HORIZON COLLEGE OF ENGINEERING DEPARTMENT OF ELECTRONICS AND COMMUNICATION FEEDBACK SUMMARY FOR THE YEAR 2016-17

Summary of feedback from the Students:

- 5. More hands on training and Workshops on VLSI would help get clear understanding.
- 6. With communication courses, more practical sessions on real life examples needed
- 7. Current advancements should be kept up in the curriculum.
- 8. More application oriented topics needed for signal processing courses.

Summary of feedback from the Parents:

- 4. More hands-on workshops may be helpful, for the overall development of the student.
- 5. Courses must be designed as per need of industry so that students are employable.
- 6. A much more deep learning in terms of practical knowledge is required along with additional projects
- 7. Syllabus needs to be concentrated more on practical and daily life situations.

Summary of feedback from the Alumni:

- 5. Students should connect with the alumni, they should be motivated to reach out to alumni for internships/project guidance or even placements.
- 6. Mentoring is a great tool to shape our thinking and working process.
- 7. Industry related topics need to be included in the syllabus.
- 8. Core electronics and circuit design need to be in focus
- 9. The curriculum was very much in line with my job. I could connect between the course material and my career, be it in industry or in academics.
- 10. Embedded system course is articulated in a good manner

Summary of feedback from the Employers:

3. PEO, PSO and POs are great. Need no further changes.

- 4. Through these various courses in the syllabus I feel students can get a good idea on the opportunities out there in the field of electronics engineering. Syllabus framed is up to the mark in building a strong foundation.
 - **5.** I believe the good number of electives and mainly hands-on experience along with exposure to real world projects helps students to choose a specific domain and pursue it to really get an idea of what a selected path has to offer, both for learning and also for a career.

NEW HORIZON COLLEGE OF ENGINEERING DEPARTMENT OF ELECTRONICS AND COMMUNICATION <u>FEEDBACK SUMMARY FOR THE YEAR 2017-18</u>

Summary of feedback from the Students:

- 1. More practical details could be mentioned in signal processing courses.
- 2. VLSI courses comprise of more of theory. Practical concepts can be included.
- 3. With communication courses, practical concepts such as Antenna design can be included.
- 4. More emphasis on latest technologies such as MIMO, OFDM & LTE is needed.
- 5. Concepts of FinFET should be introduced in VLSI courses.
- 6. Old Microcontroller interfacing topics need to be updated to the latest ones.

Summary of feedback from the Parents:

- 1. More hands-on workshops may be helpful, for the overall development of the student.
- 2. Certain courses need to be updated with Industry standards, e.g.: Microcontroller and Microprocessor based courses.
- 3. A much more deep learning in terms of practical knowledge is required along with mini projects in each semester.
- 4. It would be nice if more topics related to latest technologies can be added into syllabus.

Summary of feedback from the Alumni:

- 1. The Global / Professional classes conducted by Industry experts were extremely helpful in fetching me a job in Hardware industry.
- 2. I have really got benefited from the Mentor-Mentee concept.
- 3. I got a lot of guidance from the Counselor throughout my Engineering course.
- 4. Industry related topics need to be included in the syllabus.
- 5. It will be really good if the students are motivated to take up some circuit design or IC design projects.
- 6. The curriculum was very much relevant to my job. I could connect between the course material and my career, be it in industry or in academics.
- 7. As I am working in embedded sector, I felt like what all I have gone through academics are helpful and useful, I mean electronics part like controllers, processorsetc.

- 1. In every semester 4 electives and each elective has 7 subjects approx. Thus, in total 4/28 options to study. Here is how if there are 10 subjects. Each subject has a link in all four electives as (basic_elective1,high_elective2, advance_elective3, expert_elective4). So that students get 4/10 options, hence in-depth knowledge can be facilitated.
- 2. Knowing the scripting languages and skill of implementing it on the various EDA tools helps the students to great extent in their future career. Giving introduction to various electronic industries in academics will enable students to focus on their favorite subjects and establish their career in the same subject.
- 3. PEOs and PSOs are well thought and compiled however they can be little more descriptive to reflect the syllabus. I see that the Syllabus is vast and covers almost everything that one can think of for a graduate student. PEOs and PSOs can reflect some of the advanced technologies (which are already in syllabus) like Blockchain, Machine Learning, Big Data Analytics.
- 4. 2nd year syllabus includes Mathematics, Digital and Analog EC, Network, Signal and Systems, DSP, LIC, Life skills for Engineers, Kannada and others. I believe we should slowly start moving syllabus from 5th and 6th semester to 3rd and 4th semester. Wireless Networking, WAN, Network Security, Ethernet, Routing and Firewalls can be introduced in 2nd year. 3rd year syllabus includes CCNA which can potentially be moved to 2nd year. By the time students join engineering, most of them are aware of Internet, LAN, WiFi, 3G, 4G However they have to wait till the 3rd year to learn how these things work. Just like how final year has so many electives, we can start introducing electives from 2nd year.

NEW HORIZON COLLEGE OF ENGINEERING DEPARTMENT OF ELECTRONICS AND COMMUNICATION <u>FEEDBACK SUMMARY FOR THE YEAR 2018-19</u>

Summary of feedback from the Students:

- 1. The first module in the Microcontrollers course can be split into two modules.
- 2. With the communication courses, the topic of noise and random processes should be covered in much larger detail.
- 3. Instead of focusing on 8051, latest microprocessor/microcontroller can be taught.
- 4. The application oriented topics of each modulation technique can be included.
- 5. The topic of Active filters can included in the II year courses.
- 6. Logic families need to be taught in much larger detail.

Summary of feedback from the Parents:

- 1. It would be nice if there was more of hands-on learning than mere theory.
- 2. It would be nice if students were made ready for Electronics industry standards, way before hand, with a lot of practice in labs.
- 3. It would be nice if more topics related to latest technologies can be added into syllabus.
- 4. More hands-on learning through College labs from Industry experts can be very useful.
- 5. Syllabus needs to be concentrated more on practical and daily life situations.

Summary of feedback from the Alumni:

- 1. I found that the knowledge imparted in the Communications subjects was very helpful in starting out in my field.
- 2. I find myself using a lot of basic Electronic principles even when I am developing programs or making new testing tools.
- 3. The main improvements in the syllabus that are to be made are to increase the depth in a specific domain in the last two years, such that the students should be able to Major in a field within Electronics, such as Communications, Embedded Systems, VLSI, Computer Hardware. This I feel reflects the needs of the Industry as a whole as this would reduce the training time required for new hires.
- 4. Students currently studying should have a good connect with the alumni, they should be encouraged to reach out to alumni about internships/project guidance or even placements.

- 5. There should be a system in place which helps the students easily find through the college where alumni are working / studying and an easy method to contact them.
- 6. Rather than approaching with regular methods for internals as written exams, it is better to assign some assignments related to that particular module weighing same marks, would improve the research capabilities within a student, much needed when they proceed for final year projects and higher education..
- 7. Plagiarism must be employed in every state of assignment works, which helps in individual works rather than copy-paste.

- 6. PEO, PSO and POs look good. Need no further changes. In the "System Design using VHDL", it would be great if we can add Linux shell coding. It is very much mandatory and helps engineers to fasten their work. In "CMOS VLSI DESIGN", it will be good if we can add the design of 2-3 universal gates in detail. This will help them understand further basics. And also we must be adding the device failure mechanisms and second-order effects which are the basics for the VLSI engineer in detail.
- 7. The PEOs and PSOs of the Electronics and Communication department resonate very well with me. They aptly model the values and characteristics of a real world engineer which the world needs more of. More importantly, I personally feel the PEOs and PSOs enable students to metamorphosize into finer beings in general and also a fundamentally good engineer.
- 8. I feel inculcating a strong foundational engineering mindset right from the beginning is really vital in molding young minds, I strongly believe this syllabus is capable of doing so. More importantly, through these various courses in the syllabus I feel students can get a good taste of the plethora of opportunities out there in the field of electronics engineering.
- 9. I believe the vast set of electives and mainly hands-on experience along with exposure to real world projects enables students to choose a specific domain and pursue it to really get an idea of what a selected path has to offer, both for learning and also for a career.

NEW HORIZON COLLEGE OF ENGINEERING DEPARTMENT OF ELECTRONICS AND COMMUNICATION <u>FEEDBACK SUMMARY FOR THE YEAR 2019-20</u>

Summary of feedback from the Students:

- 1. Faculties can discuss concepts with practical videos in class.
- 2. Good response is required from "general enquiries" department.
- 3. More implementation of modern technology is required.
- 4. More practical experience needs to be provided to the students, so that the students become industry ready, by the end of the course.
- 5. More elaboration of concepts is recommended.
- 6. Every student must be actively encouraged to participate in co-curricular activities.
- 7. Infrastructure needs to be improved.
- 8. Current advancements should be kept up in the curriculum.

Summary of feedback from the Parents:

- 1. The improvements in the college are absolutely brilliant, particularly achieving top 10 rank college of Karnataka State.
- 2. Students are finding it difficult to cross the crowded road. Can the Govt. be approached to get the fly-over or some other facility?
- 3. Please improve the hostel stay procedures, and the interactions with the Bank.
- 4. Participation of personnel from industry and research to be considered, while fixing or updating the syllabus.
- 5. It would be nice if there was more hands-on learning than mere theory.

Summary of feedback from the Alumni:

- 1. Involve in lifelong self-learning, career enhancement and adapt to changing multidisciplinary professional and social needs.
- 2. Develop attitude in lifelong learning, applying and adapting new ideas and technologies as their field evolves.
- 3. The syllabus, the PSO and PEO framed is excellent for all the semester for Engineeringstudents.

- 4. In the PEO, add a line about the communications part that we learn as a part of the syllabus. Maybe we can also include a line to clarify that we will be learning a lot about communication systems and their architecture.
- 5. Gone through the vision, mission, and peo, everything looks fine for me in fact it is sufficient enough. Thank you for considering me through this process.
- 6. The syllabus rightly balances technical data and the language learning process. Priority has been given to hands on training which will provide the skills that a student can implement their Knowledge in Industrial purpose and also in academic purpose. Special interest has been given to improve the life skills and also helps in their technical development and the students can build their own career independently. I am happy with the prescribed syllabus.
- 7. Guide students with real VLSI related tools like synopsis and make them practice with different problems.
- 8. Include System Verilog and scripting in syllabus.
- 9. Make students to focus on technical knowledge than aptitude.
- 10. Please make students to spend more time in labs, especially VLSI labs.

- The Syllabus is well constructed for all semesters but few more important concepts need to be added.Below are the concepts1)Front end(HTML,CSS,JavaScript)2)Any one Backend or server(PHP,SQL Server,Python).3)Circuit design/PCB design.4)In Embedded systems many boards like Raspberry Pi,Arduino-UNO,NANO etc.should be included.And also practical knowledge on sensors & actuators expected. 5)Robotics.
- 2. Very good list of electives, students should be guided how these will help in different domain/fields of industry. It is good to have project in early stage of course which will boost interest and students will be involved in research. But lack of theoretical knowledge or idea about different concept and application will be difficult for students, better to work in 3rd year. Train/educate/inspire students not only for grade/exam also for research, creative, industrial exposure.
- 3. According to my observation syllabus and subjects selected in elective some are new & industrial oriented. Credits allocation gives weightage for all aspects with respect to personal goal, industrial requirements, theoretical, application based, co-curricular.If it supported from NAAC or universities or college, 3-5 semester give students basics of different industrial domain in electronics and divide them according to their interest from 6th semester and give them relevant professional electives and labs, for e.g., Networking, VLSI, embedded coding. And help them to work on some projects. But need support from college to setup some new labs and industry tool/licenses.
- 4. Open electives in syllabus is good option but are focused mostly only routers, i.e., networking side in ECE, could have given some more option in the VLSI or embedded or communication stream. Assignments should make students refer GATE or IEEE or any other technical sites. Collect some list of objective question framed by students with answers on a Particular topic from syllabus. Here also student will do some research.